Avian Rhetoric, Murmurations

by

Melissa T. Yang

Bachelor of Arts, Mount Holyoke College, 2011

Master of Arts, University of Pittsburgh, 2016

Submitted to the Graduate Faculty of the

Dietrich School of Arts and Sciences in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

University of Pittsburgh

2019

UNIVERSITY OF PITTSBURGH

DIETRICH SCHOOL OF ARTS AND SCIENCES

This dissertation was presented

by

Melissa T. Yang

It was defended on

June 14, 2019

and approved by

Troy Boone, Associate Professor, Department of English

Peter Trachtenberg, Associate Professor, Department of English

John Walsh, Associate Professor, Department of French & Italian Languages & Literatures

Dissertation Co-Advisors:

Cory Holding, Assistant Professor, Department of English

Annette Vee, Associate Professor, Department of English

Avian Rhetoric, Murmurations

Melissa T. Yang, PhD

University of Pittsburgh, 2019

This dissertation explores the omnipresent role birds play in the English language and in Western cultural history. Reading and weaving across academic discourse, multi-genre literature, and obsolete and everyday figures, I examine the multiplicity of ways in which birds manifest and are embedded in modes and materialities of human composing and communicating.

To apply Anne Lamott's popular advice of writing "bird by bird" literally/liberally, each chapter shares stories of a species, family, or flock of birds. Believing in the enduring rhetorical power of narrative assemblages over explicit thetic arguments, I've modeled this project on the movements of flocked birds. I initially proposed and now offer a prosed assembly of avian figures following each other in flight, swerving fluidly across broad and varied landscapes while maintaining elastic, organic connections.

My project opens on starling murmurations, and the second chapter follows skeins of geese to goose-quill pens. Chapter three homes in on pigeon deliveries, via pigeonholes and dovetails. I close with corvids, with so-called murders of crows and the legacy of a literary raven. Throughout this work, I emphasize the powerful poetics birds have inspired, juxtaposed with reminders of our frequent marginalization and elimination of these species as pests.

I hope such exhibits of human reliance on and exploitation of birds as materials of writing and rhetorics will help cultivate more mindful care and ethical treatment of the avian world, and the larger natural world.

Table of Contents

List of Figures

Acknowledgements

I have much to be grateful for, and many more names to thank than I can fit into these opening pages. First, I must acknowledge the open-mindedness and generosity of spirit and time offered by my support system at the University of Pittsburgh. I mulled over hours of inquiries and investigations with my incredible co-advisors, Cory Holding and Annette Vee. Cory met me wherever I wanted to go, in my work and in person, from library gardens to the cemetery. I've known Cory for a half-decade and still don't know where her campus office is. This is by design, and I believe our peregrinations have enriched the peripatetic design of my work. My second dissertation director, the inimitable Annette Vee, introduced me to the study of materialities of writing in a seminar which single-handedly solidified the avian direction of my dissertation. Annette is tireless department leader, a dedicated mentor, and a pragmatic presence who perpetually pushes me to be a more rigorous researcher and thinker.

I audited Peter Trachtenberg's nonfiction workshop my first year of graduate school, and the piece I workshopped in his class became my first publication. Peter gives me feedback that reminds me to write for an audience beyond the academy. I was fortunate to audit Troy Boone's ecocriticism seminar, as well, and serendipitously, we've both written about Charles Dickens' raven Grip. I first met John Walsh when we worked together to help run the local Northeast MLA conference, and since generously stepping in as my outside reader, he has diligently provided productive and constructive written feedback, along with helpful multilingual expertise.

Several faculty members not on my current committee have generously devoted time to enable my endeavors: Nancy Glazener, whose unwavering support in publication practicums and beyond have been so consistent and appreciated; Paul Kameen, who worked through multiple

revisions of my “jizz” project, now pending publication; and Don Bialostosky, who often forwarded me fun stories of birds. Enormous gratitude also goes to those who made my wonderful work-study experiences possible: Jean Grace, Geeta Kothari, and Sandy Foster in the writing center, and Matt Lavin in the Digital Media Lab. Jesse Daugherty and the English Department office staff deserve shout-outs as well. Finally, I must thank my undergraduate mentors, formerly of Mount Holyoke: Laura Greenfield and Christine Overstreet, who led me to the field of rhetoric and composition, and of course, Andy Lass.

My research was made possible as well by the Pittsburgh bird enthusiasts and professionals who took me under their wing and shared their lives, loves, and work with me: from the BirdSafe Pittsburgh group to the Christmas Bird Counters, led by Mark VanderVen; from Kate St. John’s walks and talks to Bob Mulvihill’s National Aviary projects. Thanks to Dave Corry of the Tarentum Homing Club pigeon racers, to Mallory Sarver, for Powdermill and park adventures, and more. Thanks also to many librarians, archivists, educators—especially to my reliable interlocutors at Hillman, Heinz, the Philadelphia Free Library, Oxford, and beyond.

Peers I’d like to acknowledge include my first-year cohort who became my first Pittsburgh community of many to come. I want to thank my Pittsburgh Acro family, who reminded me to be playful and exploratory and to care for my body while I cultivated this so-called life of the mind. Much love to my many friends, near and far, human and animal—you know who you are. I’m grateful to my parents, Kuochu and Steve, for cultivating in me from a young age the love of reading and learning, and for letting us raise the birds that led me to this line of passionate inquiry. Finally, this is for my amazing sister, Dr. Jenn, my lifelong best friend, expert on roots, and patient editor—I couldn’t have done this without you.

1.0 Introduction

1.1 Preparing for Takeoff

My initial curiosity in birds was piqued through rather traditional study of Western literary canon from the Middle Ages to the Victorian era, and has since expanded in every direction. In the beginning, it was the abundance of birds in poetry which caught my attention—from Chaucer's "Parlement of Foules" to Romanticist poetry, with Coleridge's iconic albatross, Shelley's skylark, and Keats' "Ode to a Nightingale," not to mention John Clare's observant avian poems, and many more. I have long been enamored by Emily Dickinson's ouevre—"Hope is the Thing with Feathers" is the first poem I ever memorized in elementary school. In college, I became fascinated with Charles Dickens' pet raven Grip, and his influence on Edgar Allan Poe during a memorable seminar with Chris Benfey on "Literary Biography." I credit this project for launching me into full-time avian study—and I've now come full circle, and woven pieces of this project into the final chapter of my dissertation.

x

"Concepts are the ideas that hold a discipline—like ornithology—together but at the same time point the way for new research." – Tim Birkhead, The Wisdom of Birds (9)

It was in my undergraduate days at Mount Holyoke College when my anthropologist-poet advisor Andy Lass first taught me to attend carefully to inten*t*ion as well as inten*s*ion in my work and words. Intention is something writers and scholars contend with across disciplines—what is the design and purpose of what we have set out to do? What is it we care about enough to try to convey to an external readership, and who is this readership? What impact do we want to have

on our audience; how do we want our readers to use work? How and by what means do we aim for our messages to move through our disciplines and improve the larger world? In academic projects, prefatory remarks are often meant to convey intention by answering such questions.

Of course I care about intention, but it is on the sibilant secondary sister-word, inten*s*ion on which I always wish to linger longer. More precisely, it is in the liminal and playful entanglement across these terms which buoy my project: think: the intentions of intension, and vice versa. Let me offer definitions to begin.

(Offering definitions is something I do frequently in this project, usually pulling first from the *Oxford English Dictionary* (*OED*) and then cross-checking several sources to note British and American nuances. This is not meant to suggest the reader does not already know what these words mean, but to invite active reading and interpretations, speculation and engagement. My priorities here do include promoting accessibility, and demonstrating that using accessible language in research-based storytelling can cultivate care for the natural world—work that feels urgent in our current heated natural and political climate.)

"Inten*s*ion" in its more technical, linguistic, and logical context, and in the sense I recall Andy emphasizing, is the "internal quantity or content of a notion or concept, the sum of the attributes contained in it; the number of qualities connoted by a term" (*OED*). Inten*s*ion is concerned with the semantics and possible polysemy, or multiple meanings, of any concept. A collection of inten*s*ions forms a "comprehension," again via the *OED* in its fourth noun definition*:* "*Logic.* The sum of the attributes comprehended in a notion or concept; intension." To contrast, a recollection of inten*t*ions furthers comprehension in a general sense, as in the first *OED* noun entry: "Inclusion, comprising…the fact or condition of being so comprehended or comprised in a treatise, classification, description, proposition, etc."

Inclusion is another "in"-prefixed concept essential to this project (and as a self-imposed constraint to write as inclusively as possible, I have tried in places to merge my marginalia with body text, foregrounding footnotes to receive more equal footing). Since birds can be seen, heard, and identified in everyday settings without special equipment, ornithology was regarded from its origins as a "classic example of an inclusive scientific field" (Barrow 5). Ornithology first emerged as a term in the 17th century, but developed as a former discipline closer to the 19th century. When "Natural history fragmented into several separate scientific disciplines," and scientific study became more rigorous, formalized, and exclusive, ornithology became "one of the first zoological disciplines." to branch off and generate "considerable attention and support" (Farber xix). As the fledgling discipline began to take off, elements of its original inclusivity was preserved. 1905, curator Frank Chapman remarked of the study of birds, "in no other branch [of science] are the professionals so outnumbered by the amateurs; and this fact it seems to us, should be constantly held in mind in any consideration of ornithological interests" (Chapman qtd. in Barrow 5). Even today, ornithologists and citizen scientists often work closely together.

x

In a now-obsolete *OED* definition, "intension, *n.*" is "the action of stretching, tension; straining." In a current meaning distinct from its technical definition, the term has stretched to signify the "Strenuous exertion of the mind or will; earnest attention, intentness; resolution, determination." It is linked more explicitly to "intention" by this second sense. Perhaps an intention of my larger project is to explore how intensions manifest across literary figures and everyday landscapes alike (and again, vice versa). There is also an obsolete rhetorical context of "inten*t*ion" as the "Intensification of force or meaning; the use of a word to such an end" (*OED*)

worth consideration. This project is infused with imperfect mirroring and recombinatory play: chimerity and chirality run rampant.

x

Returning to Andy, it is possible my nostalgic vision of him gesturing wildly while lecturing on semantics in his corner office during our weekly lunch meeting is misrepresented, or even invented—I finished my BA nearly a decade ago and was never a reliable journaler. Perhaps my attribution is wrong or the details are invented, or someone else or some other text was responsible for opening up this world of words. Whether this origin story matters at all may seem murky, but this feels like the right place to begin as an illustrative anecdote highlighting key elements of my current project. Some of the main themes and topics my dissertation is concerned with but not limited to include (beyond birds):

- Lives
- Words
- Life stories
- The stories of lives of words: or, etymologies (where inten*s*ion comes in)
- The stories of words of lives: or, biographies (where inten*t*ion plays a role)
- The naming of things, people, ideas, concepts, categories, etc.; onomastics
- Imperfection of memory; the relationship of mimicry and mystery to invention
- Connectivity, weaving, entanglement, and "multi-verse" materialities and fluidity

x

From the first chapter onwards, these themes will manifest in series of tales I've collected and will recapitulate about birds and figures. In the English language (and many others, too), words and idioms with etymological links to and stories rooted in birds often carry mixed connotations and migratory definitions. My dissertation defines and constellates a series of such words, and shows how such etymologies speak to bird-human relations and human attitudes and treatments of birds in the cultural histories of English-speaking nations.

The affective and material nuances of these words' definitions shift in ways that mirror cultural attitudes toward specific birds, and these attitudes have shaped the ways we use birds to make knowledge in the Western world. This matters because bird matter (wild, domesticated, dead, alive) has been essential to human civilization-building, yet the reputations assigned to the everyday avian world are often tinged with negativity. The irony of how often common birds are trashed as pests, despite being celebrated by bards in our cultural and poetic histories, is striking. Furthermore, the frequent anthropomorphic treatment of various birds means many avian species have been represented throughout centuries to reinforce racial, gender, and class stereotypes.

Ultimately, I hope to usher in more consistent attention to and understanding not only of birds, but of human relationships to the natural world more broadly. This project is largely built on care for the natural world, after all, and concern for its deterioration and endangerment.

1.2 The Bird-Human Contact Zone

By delving into the "bird-human contact zone" (a descriptor coined in a fly-by comment by Nancy Glazener, alluding to Mary Louise Pratt), my work intends to illuminate the rhetorical implications of the figures, stories, science, sensations, tensions, and intensions that emerge when humans and birds interact in the world. The overarching questions with which I opened this line of inquiry were: how do we compose [with] birds in the English language? How do the ways we compose [with] birds become embedded in English in literal, material, conceptual, and figurative ways? How do these bird compositions intentionally and unintentionally play roles in everyday communication, and in knowledge-making across and beyond academic disciplines?

In my research investigations and composing, I am invested in practicing what I call a "multi-verse" approach (to emphasize the prefix and subsequent lyric while avoiding conflation with the unhyphenated cosmological multiverse). What I mean is simply that I am committed to multidisciplinary multitasking on multi-sited and multimodal investigations—and, of course, to multiplicities, in my multispecies research.

"Multiplicities" is a loaded word with many interpretations, but most relevant here may be the ideas of Gilles Deleuze and Felix Guattari in *A Thousand Plateaus* (1980), where they write: "becoming-animal always involves a pack, a band, a population, a peopling, in short, a multiplicity" (39). Multiplicity and animality are linked across this work, which is used as a launching point by many multispecies scholars. After all, Deleuze and Guattari's larger project is is in part a ludic attempt at a proof-of-concept of the rhizome as a model for critical inquiry.

A rhizome in plant biology is the "elongated, usually horizontal, subterranean stem which sends out roots and leafy shoots at intervals along its length" (*OED*). Deleuze and Guattari reject the standard thetic mode of scholarship, calling common metaphors of roots and trees branching, or the "arborescent model," limiting. Instead, they propose the rhizome as a model form and figure for more compelling scholarship. Since "any point of the rhizome can be connected to anything other, and must be," it opens up many more possibilities and directions of inquiry, insight, and play (Deleuze and Guattari 7). To summarize their goal of writing a book that subverts standard book form, they say:

> "...a book composed of chapters has culmination and termination points. What takes place in a book composed instead of plateaus that communicate with one another across microfissures, as a brain? We call a 'plateau' any multiplicity connected to other multiplicities by superficial underground stems in such a way as to form or extend a rhizome. We are writing this book as a rhizome. It is composed of plateaus. We have given it a circular form, but only for laughs." (22).

In writing my own dissertation, I draw on this rhizomic model, but attempt to literally elevate it—moving from ground-bound stem to airborne species. I wrote in my prospectus: "I want to write a dissertation that mimics a murmuration of starlings—to craft a prosed assembly of avian figures following each other in flight, swerving fluidly across broad and varied landscapes while maintaining elastic, organic connections. I begin with murmurations because the word's polysemy establishes and enacts the impetus, objective, and subjects of my dissertation in one fell swoop."

In essence, I have taken both the rhizome and later "becoming-animal" fragments of Deleuze and Guattari to task, composing to model the flocked and nested forms of various avian species: starling murmurations, pigeon kits, geese skeins, corvid murders. This is sometimes circular, rarely linear, usually just messy, and definitely resists thetic order, but occasionally makes micro-arguments along the way.

x

In the collaboratively-authored introduction to Eben Kirksey's edited collection, *The Multispecies Salon* (2014), the writers note that while "ethnography" is commonly broken down into "ethno-graphy" and thus "people-writing," it is worth reconsidering the Greek root of *ethnos* as "'a multitude (whether of men or of beasts) associated or living together; a company, troup, or swarm of individuals of the same nature or genus'" (Grimm et al. qtd. in Kirksey et al. 1).

In my own work, which takes more of a general writerly than formal ethnographic approach, I have immersed myself in avian archives, local and abroad, observed ornithologists and interviewed avian technicians, volunteered with citizen science endeavors, and attended bird walks with countless enthusiasts and experts. These research endeavors have been transformed

into papers, posters, installation art sculptures, slideshows, abecedaries, and more. Much of it is only glossed over in the dissertation itself, but even where this work is only touched on in brief tangents, these experiences were essential in allowing me to more fully understand the dimensions of the avian world and words with which I was engaging on the page. Tangents, and fragments, too, are stylistic decisions—as birds flit from feeder to flower to branch to bush, I flutter between stories, ideas, contexts, and so on, often lingering briefly, sometimes revisiting a favorite perch several times over, or roosting for longer, in an effort to cross-pollinate productively between as many things, themes, etc. as possible.

1.3 Composing Avian Rhetorics

In English, especially in the area of rhetoric and composition, where I am now situated, there are frequent arguments on the effectiveness of traditional academic prose. This, with a longtime love of experimental poetics, has led me to experiment with form in this dissertation. I always aim to craft the sort of hybrid writing that is accessible and engaging to non-academic readers, without compromising scholastic integrity or rigor. The contemporary multi-genre writer-scholars whose work I most admire and draw inspiration from include writers such as Maggie Nelson (*Bluets*), who cites Eileen Myles' idea of "vernacular scholarship" to describe her fusion of poetry/nonfiction/scholarship.

Model essays and examples on the possibilities of alternative academic work can be found in *ALT DIS: Alternative Discourses and the Academy,* edited by Christopher Schroeder, Helen Fox, and Patricia Bizzell (2002). Sidney Dobrin asserts, "we must identify all discourses as hybrids," and voices a common goal among the compositionists represented to

"encourage…work that promotes change, shift, alteration in the entrenchment of academic discourse" (Dobrin). Bizzell's opening essays specifically call for discourse alternatives which subvert standards developed by the wealthy white men in power for much of academic history. My identity as a triple-minority is certainly at play in my writing, and in my ongoing interrogation of margins/marginalia, queering forms, and so forth.

The ongoing grappling with the definitions of the various terms, of "alternative," "hybrid," "mixed," and "academic" versus "non-academic" are particularly fascinating to me—as well as the problematization of such categories/taxonomies. Malea Powell also critiques the existing thetic model in "Listening to ghosts: an alternative (non)argument," calling attention to how academic thinkers "have cut the wholeness of knowledge into little bits, scattered them to the four winds and now begin to reorganize them into categories invented to enable empire by bringing order to chaos and civilization to the savage."

I think in all of these pieces, there is an invitation to embrace chaos, and to write reactively to pressures long-hovering around my immediate fields and the larger academic world. Experimenting with non-standard and chimeric forms in dissertation projects strikes me therefore as a logical, if not urgent, response to an ongoing call for change. I write in hovering, murmuration form because of agitation, perhaps in hopes of survival—but I also write this way because I am curious about the sensational, sensual power and possibilities of words arranged unexpectedly in the world(s) we inhabit. It is inevitable that some selfish human wonder drives this endeavor.

Still, I believe strongly that to make the greatest impact in writing studies, broadly construed, critical and creative realms have no reason to be separated. Almost all writers are

concerned with craft, and with the power, possibilities, and pedagogies of writing in a range of contexts. We believe words matter, that words are material, and can make change(s).

As a current teacher of writing, rhetoric, and multimodal composition, as well as a professional writing consultant and editor, I am constantly seeking moments where my research and pedagogical endeavors can speak to each other in mutually beneficial ways. Thus, there are several moments where I turn to explicitly address the writing classroom throughout this project. While each of these moments could morph into their own standalone projects in the future, I make space for them in this project to reinforce and reiterate the ongoing dialogues between my research and my teaching. Furthermore, an early definition of "rhetoric" from the *OED* defines it simply as a "literary prose composition...a school exercise." In addition to treating dissertating as an extended "school exercise," I am interested in the pedagogical exercises that can be derived from this work. Since "exercise" suggests intellectual movement as well as physical endurance, in my rhetorical exploration of birds, I begin with avian movement, via murmurations.

I also tried to use this "school exercise" as an experiment in academic writing against the grain—in part to play with distant and close reading and storytelling, and to limit my use of academic jargon and make my work accessible. I recently realized that Chaucer, quoted by Helen Sword in *Stylish Academic Writing,* called jargon the "inarticulate utterance of birds"—and this definition is reflected in the first *OED* definition of the word (Sword 112).

x

This dissertation, in any case, is my set of field notes toward an avian rhetoric. Organized as a flight sampler and divided by legs, it revels in chimeric metaphors. Each leg, or chapter, explores implications and responses to my initial guiding questions through analyzing a bird-saturated term, or set of terms, and related figures, in the English language. They all lead with

and are organized around stories about birds and words, poultry and poetry. My legs/chapters are modeled in spirit and form in response and extension to the 2017 special issue of *Rhetoric Society Quarterly,* "A Rhetorical Bestiary." Jeremy G. Gordon, Katherine D. Lind, and Saul Kutnicki firmly assert in their introduction, "Rhetoric has always been bestial," but it is especially urgent to address this now, "in the midst of impending ecological catastrophe" (222). (Their use of "impending" is, I think, optimistic).

The writers hearken to the ever-evolving bestiary genre, originally developed in medieval times as a reference full of entries about animal forms used to "help advance religious teaching and record tales of morality" (224). The bestiary became more secular and scientific through the centuries, and is proposed here as a generative and supple rhetorical form which "supplies a thematic and stylistic range of overlapping and intersecting modes of storytelling, fable-making, scientific wisdom, and moral wisdom" (224). The issue features a series of entries on individual species, involving a playful critical-creative mix of storytelling, ideation, and theorization. Citing Massumi's ideas, the introduction justifies this hybrid approach in a way which resonates with my own project, so I will copy it in full to preface my first entry:

> If we are to get even a whiff of what animal rhetoric might teach us, vibrant, even excessive playfulness and lived expressions are necessary, particularly those that expand menageries and promote an open-ended range of rhetoric. Such attempts to re-territorialize rhetoric according to ecological habitats risk looking and feeling 'out of place,' like an invasive species of argument that marks things and then scurries away before they are caught. As such, we request the reader's patience and openness to the rhetorical bestiary's presentation of an intellectual style that, at times, may look and feel a-stray. (226).

Pieces of my project follow in the form of the "Rhetorical Bestiary" articles to the point of imitation. This is, in a sense, a means to enact and connect mimicry, a much-analyzed issue in English studies (from Aristotle and Plato to Dionysian *imitatio*, to Erich Auerbach, among countless others), to literal birds that mimic human voices. *Listening* to birds is one of many

ways to access and analyze the natural world through sensory engagement. My work here links its lineage broadly to the burgeoning area of animal and sensation studies in rhetoric, echoing back to George Kennedy's landmark "A Hoot in the Dark" (1992), on the intrinsic rhetorical energy in non-human animals.

I find additional kinship with the discursive tradition of connecting composition and rhetorical studies to figurative and actual ecological endeavors. The *Oxford English Dictionary* holds several definitions of "ecology," but the clause which resonates across most disciplines is "the interrelationship between any system and its environment." My work hovers around the idea and implications of circulation, especially appropriate as the first chapter is concerned with how a certain bird circulates in this world. Specifically, I explore the European starling, its unlikely entry into the United States, and the murmurations that ensue.

While this first chapter aims to enact these themes of scholastic inquiry by gestural storytelling rather than in the form of argumentative academic analyses, I will reflect throughout on the undercurrents of theory carrying the larger project. Ultimately, animal studies at large necessitate inquiry and research that is inter-, multi-, cross-, and trans-disciplinary, and must reach an audience beyond any immediate discipline to be effective. Furthermore, it is important to keep in mind Anna Tsing's declaration that "human nature is an interspecies relationship" in and of itself.

Regarding the rhetorical effectiveness of stories, recent findings in science communications studies have suggested narrative modes are the most persuasive not only to lay audiences, but to other scientists as well. In a humanistic project, bringing attention to the culturally-bound nature of human care for birds through narratives will hopefully also have a lasting impact. I hope this work will usher in more consistent attention to and understanding not

only of birds, but of the ecologies they inhabit, and ultimately to remind us all to navigate the natural world in more creative, mindful, and curious ways—rather than in constant pursuit of expertise, mastery, and control.

2.0 Avian Rhetoric, Murmurations

Figure 1: "Murmur #20," Richard Barnes (2005)
Used with permission from the photographer

*

Starlings, Emerge

"Part of the fascination of the starlings is the way they seem to be inscribing some sort of language in the air, if only we could read it." – Jonathan Rosen

The common European starling (*Sturnus vulgaris*) is an unprotected and oft-detested pest bird in the United States today, and most mainstream media of the last century have reported on the species with a blended tone of agitation and awe. One 1930 *Time Magazine* clip, "Starling Plague," characterizes starlings as insufferable "dark, impudent, and noisy" birds with "voices...rough as crows," who "fight constantly." Further bdelygmia is prosed in paratactic form by Robert Cantwell in 1974, who calls them "cocky, belligerent, disagreeable, aggressive, dirty, foul, filthy and just plain rotten." "Bdelygmia" is especially apt here as this term for hateful rhetoric is derived from the Greek word for "filth" or "nastiness." Cantwell's article, published by *Sports Illustrated,* is similarly titled "A Plague of Starlings." In a 1990 article marking the centennial of the bird's introduction to the United States, *New York Times* journalist Ted Gup claims the bird has "distinguished itself as one of the costliest and most noxious birds on our continent" (Gup 19). Writer George Laycock is quoted noting aptly that "Starlings do nothing in moderation" (Gup quotes him anonymously as an ornithologist on 19; Haupt credits him as a naturalist on 67, and all attribute this quote to Laycock sans exact citation of primary text).

Starlings notoriously eat metric tons of farm crops each day across the United States. Gup writes, "What they don't eat they defile with droppings," and their unsightly defecation is linked to dangerous diseases (19). Starlings bully native avifauna from desirable nesting holes; the U.S. Department of Agriculture reports via Cantwell, "It seems almost as if the bird was actuated more by a morbid pleasure of annoying its neighbor than by any necessity arising from a scarcity of nesting sites" (Department of Agriculture Bulletin No. 86S qtd. in Cantwell). There is an

unsettling anthropomorphic undertone characteristic to many of these pieces across the decades. The starlings are also likened, whether deliberately or not, to human migrants, linking an uneasy parallel between the discourses hurled at pest birds to marginalized human populations even today, evident in writings of starling detractors, apologists, and enthusiasts alike.

In Frank Chapman's 1925 piece on "The European Starling as an American Citizen," he notes, "the starling makes such strong demands upon our hospitality that even its friends resent its presence." In 1939, Rachel Carson authored a short piece in *Nature Magazine* asking pointedly, "How About Citizenship Papers for the Starling?" She reminds readers of the ornithological certainty that the "starling is here to stay," and asks, "Shall we then continue to regard him as an alien or shall we conclude that his successful pioneering and his service in insect destruction entitle him to American citizenship?" Decades later, the Western Pennsylvania-born Carson went on to win the Pulitzer Prize for *Silent Spring* (1962), a groundbreaking work of environmental activism whose title is drawn from John Keats' lines on silenced birds: "The sedge is withered from the lake,/And no birds sing" (Keats, "*La Belle Dame sans Merci*").

Prolific natural history writer-illustrator Wilfrid Swancourt Bronson likewise defends the birds from their ill reputations as "foreigners," with a blend of scientific detail and a heavy dose of anthropomorphism. He writes in the gorgeous 1948 children's book *Starlings,* "let's remember that, like ourselves, starlings are partly good and only partly bad," believing it unjust for people to "think that starlings have no right to food or nesting-places because they are not 'American birds'" (Bronson)**.** In *American Perceptions of Immigrant and Invasive Species: Strangers on the Land*, historian Peter Coates quotes journalist Jake Page on how people began to regard "the starling with the same wariness with which the American Indians no doubt

observed the Pilgrims" as they began to spread (Coates 64).

Celebrity birder Noah Strycker, who set a world record in 2015 for seeing over six-thousand birds in one year, included a section on starlings in his 2014 book, *The Thing With Feathers: The Surprising Lives of Birds and What They Reveal About Being Human*. Strycker suggests, "The starling's only real fault is success," and seconds journalist Jonathan Rosen in saying, "What we admire in ourselves we often abhor in our neighbors" (Strycker 40). Starling supporters often remind readers of their redeeming features; Strycker writes, "Starlings are often blamed for the population collapse of cavity-nesting birds…but research shows that this probably isn't true…Starlings do occasionally damage crops, but their effects are slight compared with those of others" (41). He believes, "Perhaps we should take more time to appreciate the starling's merits" (ibid). Bronson notes, "Sometimes starlings are blamed for things the grackles do," and believes the birds were "imported to help us fight the insects" because humans were hunting down native American birds so rapidly that this was a reasonable resolution (Bronson).

While Bronson's insect-hunting theory may be spotty, Carson had indeed acknowledged at the time of her writing that the Department of Agriculture's research confirmed starlings were "one of the most effective bird enemies of terrestrial insect pests in this country" (US Dept of Agriculture qtd. in Carson 317). Even the vitriolic *Time* piece agrees starlings' "only commendable trait is a fondness for potato bugs." Detractors still complain predictably; while it's true starlings eat bugs, "native birds had been doing so for thousands of years before the starlings arrived and needed no help from pushy strangers" (Cantwell). Their worst trait, it appears, is a "dismaying...inexhaustible enthusiasm for reproduction" (ibid). Indeed, the birds continue to multiply rapidly today, and their populations have reached 200-million in the United States. Strycker declares, "Few species have ever spread so fast or multiplied so quickly—except

humans" (40).

This flavor of anthropomorphic discourse is omnipresent and pointedly parsed in Kelsi Nagy and Phillip David Johnson II's edited collection on *Trash Animals: How We Live With Nature's Filthy, Feral, Invasive, and Unwanted Species.* Randy Malamud introduces the book by noting the "range of nonhuman animals who are despised or feared or mocked because we have constructed them as the disgusting 'other' in our anthropocentric fantasies of existence" (ix). Humans, he claims, "like to imagine that we are in control," and in our power play, we appoint ourselves to decide "which species are allowed and which are banned...based on our prejudices, our taste, and our habits" (ibid). This leads to a "trash-labeling of certain species" similar to the "trash-labeling of certain racial, ethnic, and religious human cultures" (x). Malamud fervently concludes, "If anyone deserves the epithet of trash animal, it's us! We create more trash, and we hierarchically arrange (pervert, destroy) the world according to a scale of values...often directly antagonistic to environmental sanity" (xii). Nagy and Johnson follow Malamud by emphasizing how "the more one learns about a trash animal, the more that animal seems prophetically similar to the human species. Animals that successfully inhabit new environments, alter landscapes, and disrupt ecosystems remind us, uncomfortably, of ourselves" (25).

*

While some starling populations migrate, many overstay their welcome year-round. While some suggest selective migration can be attributed to avian agency, we must also consider the unpredictable patterns perpetuated by the continually changing climate of our warming globe. Curiously, starlings as a species seem to thrive despite adversity across America, while in their native Europe where they are protected, their numbers have begun to decline.

At a mere 8.5-inches long, these medium-small birds appear innocuous as individuals, even charming on inspection; their looks vary by age, sex, and season. Mature birds have glossy dark plumage trimmed with green-purple iridescence, whereas juveniles are a fluffier medium brown. Bright white "star"-tipped feathers appear after the adults' late-summer, post-breeding molts, and are shed again by spring. Some say they are named for this spangling, and others believe the star of *Sturnus* derives from the "shape of the bird in flight, with its pointed wings, bill, and tail"; *vulgaris* means "common" (Haupt 5). Jake Page antagonistically questions the nomenclature of starlings in the *Smithsonian Magazine*, noting the bright "star"-tipped feathers some say the birds are named for: "Stars? Rock stars, maybe. The way they swagger around the lawn reminds me more of the large and ill-bred bullies of an otherwise happy childhood. But starlings, like bullies everywhere, inspire awe" (Page).

During breeding season, the female birds' yellow beaks take on a pinkish tinge at the base while the males' bill base becomes a bluish grey; in winter, starling beaks are uniformly brown-back. In transitional phases, the birds can be idiosyncratic, but even in their most mismatched plumage, the appearance of any individual bird cannot rival the visual impact of these birds flying together in their enormous fall and winter flocks, "murmurations."

While any collection of starlings can be called a murmuration, the term most often refers specifically to skyborne groups which flock just prior to dusk in autumn and winter. (In spring and summer, starlings stay in smaller nuclear family units). In such pre-roost murmurations, starlings perform what appear to be "mass aerial stunt[s]" together, "swooping and diving in unison" (Royal Society for the Protection of Birds). The human language of choreography is often projected onto these "mysterious, graceful, spellbinding dance-clouds" (Haupt 232). See, for example, "A Bird Ballet" (http://www.neelscastillon.com/portfolio/a-bird-ballet) which

features a swirling murmuration set to indie music. The videographer Neels Castillon explains, "We were shooting for a commercial, waiting for a helicopter flying into the sunset, when thousands and thousands of birds came and made this incredible dance in the sky." Any Internet search for murmurations will yield a vast numbers of starling videos, and this is one of the higher-quality captures, but even the blurriest phone-captured shots elicit broad and enthusiastic responses.

These starlings move in startlingly massive, majestic assemblages, numbering from hundreds to over a million birds following each other in flight. They resemble a school of fish on wings, weaving patterns in air instead of water. The dramatic, sky-darkening flocks are known to enchant even those who loathe starlings. Multi-genre writer and Pittsburgh native Annie Dillard describes "starlings going to roost" memorably in her Pulitzer-winning *Pilgrim at Tinker Creek* (1974). She observes "flock sifting into flock…transparent and whirling, like smoke" of a group of birds who "seemed to unravel as they flew, lengthening in curves, like a loosened skein" (39-40). "Each individual bird bobbed and knitted up and down in the flight at apparent random …yet all remain perfectly spaced," she continued, and the "flocks each tapered at either end from a rounded middle, like an eye," before taking off "Into the woods…without shifting a twig, right through the crowns of trees, intricate and rushing, like wind" (40). Journalist Daniel Butler calls this "one of the most magical, yet underrated, wildlife spectacles on display" (Telegraph UK).

It seems as many encomiums can be found of flocked murmurations as invectives about the starling species. It is common for authors to denounce the entire species as destructive, wish they were never released in American air, and wax poetic about their flock aesthetics in the same few sentences—*and,* occasionally, about the charming personalities and smarts of the birds.

Starlings elicit complex, contradictory reactions in their multiple iterations and interactive contexts, which lead to compelling compositions, and establish them as a species enmeshed in and subject to the complicated cultural and rhetorical constructions of humans. The writers who obsess over starlings are alert to this; as Haupt writes, just this "juxtaposition of the hated and sublime is fascinating enough" (112).

As a natural phenomenon, murmurations hold a unique power to incite wonder in a way that unites human interests and efforts across fields, arguably universally—after all, starlings thrive almost everywhere people live, in part due to human provisions. Poets compose diverse verses about them; artists are inspired by their aesthetics; citizen and professional scientists collect data for their analyses; designers and engineers derive models from their flocking patterns, etc. By inciting wonder that invites multidisciplinary exploration and experimentation, murmurations are a dynamic natural form and rhetorical force driving environmental education and action, as well as large-scale cultural knowledge-making in ways worth further examination. Murmurations can be unpredictable, at once dangerous and illuminating and sublime, simultaneously admired and feared, like the birds they are composed with.

Starlings, too, embody an ironic and slippery poetics of pestilence—while the individual starling is frequently detested as a dirty nuisance, the species is also prized as pets and mimics. Wolfgang Amadeus Mozart was famously influenced by a pet starling of his own, in a story which inspired nonfiction writer and naturalist Lyanda Lynn Haupt enough to rescue and raise a starling of her own. She penned a gorgeous account of their intertwined tales in *Mozart's Starling* (2017). Via Haupt and many others, legend also has it that one line of William Shakespeare's *Henry IV,* featuring a talking starling as a fantasy revenge mechanism, is the reason the bird was introduced to the United States at all. While the veracity of this tale can (and

will) be challenged, its influence is unquestionable. Regardless of specific intention, starlings are only in the United States because of human intervention and interaction, and despite our efforts to control them, we have failed. To compensate for an inability to gain absolute authority over these birds, humans continue to find ways to at once marginalize, learn about, and benefit from them.

Despite many focused efforts to understand starlings and their flocking habits, much about starlings and their murmurations may always be mysterious to us. I hope they always will be; unsolved mysteries are almost always more compelling than closed cases, as they satisfy through wonder. Mystery is one of several common discourses central to starling murmurations, especially essential to grapple with in the context of multidisciplinary writing studies; others which will emerge and re-emerge include meanings, movement, mimicry, myths, and of course, man's efforts to master nature.

Across this multidisciplinary exploration, the murmuration (as polysemic term) serves as an orienting figure in literal and metaphorical ways. To echo my prefatory remarks, my goal was to write a dissertation that mimics in some arrangement a murmuration of starlings—with an assembly of avian figures following each other in flight, organically maintaining connections while moving fluidly across broad and varied landscapes. It is also worthwhile to acknowledge that dissertations, like starlings and their murmurations, are among the most despised and overpopulated forms in our cultural landscape. Perhaps I want to demonstrate or at least remind that dissertations do not need to be treated as pests, and their pages can hold space for poetry, in some agitated arrangements.

*

Meanings

"Of themselves, words are polysignificant, extending rays of allusion in many directions."
– Alphonso Lingis (176)

Manifestations of human wonder know no bounds and are represented in myriad iterations from the mythic to machinic, and back again. Consider how humans tried to gain expertise by reading the natural world in specific ways since ancient times, including from the bodies of animals and the flight of birds. The term "augury" arrived in the English language from multiple origins, but its primary etymon is the classical Latin term *augurium,* which denotes divination "from the flight of birds." Ancient Roman augurs, therefore, "studied the flight patterns of birds to divine the will of the gods" (Rosen). Murmurations were used, then, in augury, an activity tied to the divine, which marks in some sense an impatience directed toward a supposed spiritual body. Pliny the Elder observed the strange spectacle of the starling flock in *The Natural History,* "It is a peculiarity of the starling to fly in troops, as it were, and then to wheel round in a globular mass like a ball, the central troop acting as a pivot for the rest" (Pliny).

The term "murmuration" is variably used to signify either a generic starling group of any size, the "large gathering of starlings creating intricate patterns in flight" mentioned above, and/or the "noise made by a flock of birds" (*OED*). "Murmuration" first entered the English language in the fourteenth century as a poly-rooted import used as a "chiefly *literary*" expression of discontent, as well as the action of "spreading a rumour or rumours" (all italics and lexical excerpts are from the *OED* unless otherwise marked).

Etymological origins of "murmuration" include Middle French for "complaining, grumbling," and the classical Latin noun *murmurātiō* for "continuous utterance of low cries,

muttering, grumbling." The word also derives from the onomatopoeic Proto-Indo-European root *mormor*-, or *murmur*-, found in ancient Greek *mormýrein* "to boil noisily (of water)," Sanskrit *marmara,* for "rustling, rushing," *murmėti* in Lithuanian "to babble, mutter," and German *murmeln*, "to mumble, murmur" (*OED,* supplemented by *Dictionary.com* and others).

Scientists have suggested in parentheticals that the term "murmuration" came to be used to describe the bird flock due to this onomatopoeia, through "the sound produced by multiple wingbeats" (Goodenough, et al.). Haupt notes that while some ornithologists believe the name derives from the "varied songs and sounds" of starlings, they "do not call out much during their flock-dances" (Haupt 232). Thus, she sides with "other avian etymologists who believe that the name comes from the whisper of wings, so many wings, together in flight" (ibid). Annie Dillard's evocative likening of a murmuration's sound as one "of beaten air, like a million shook rugs, a muffled whuff" echoes this inclination (Dillard 40).

The first example for English usage of "murmuration" in its earlier sense includes no mention of starlings, despite being penned by a writer known for his bird-filled oeuvre. Geoffrey Chaucer writes in *The Parson's Tale,* c. 1390, "After bakbitynge cometh grucchynge or *murmuracioun* and som tyme it spryngeth of inpacience agayns god." This translates roughly to: "After backbiting comes grumbling or *murmuration* and sometimes it springs of impatience against god" (emphasis added). This line arguably contains allusive/elusive connection to murmurations in their modern avian use despite its lack of explicit starling content.

In my own automatic, anthropocentric inclination to make meaningful connections, I see the link through a possible anthropomorphic suggestion that starlings in their flocks generate a sense and sounds of being unsettled, of agitation. Original sources do not articulate

how or why a term used to describe the action/noise of disgruntled humans is the same used to describe starling flocks, so I can only speculate as to how a word signifying complaints sans birds came to describe flocks composed of birds that humans complain about. Complaints about starlings and rhetorical construction of the birds as invasive pests are rather modern and American phenomena.

*

Mastery

"Our creativity and our connection to other beings is tangled in a beautiful etymology.
The words creative and creature spring from the same Latin root,
creare*, "to produce, to grow, to bring into existence."*
– Lyanda Lynn Haupt (211)

I often wonder about the extent to which any intelligent species is aware of their own limitations. As humans, we often appear motivated by mastery, and work toward masteries of facts and skills that lead to what might be labeled as a meaningful life. In academia, we write theses to earn advanced degrees with which to mark our mastery in specific fields. Limitations are often treated as challenges to overcome to achieve various masteries and interdisciplinary work is often accused of being too dilettantish to denote actual mastery. As a discourse, mastery is often linked to control and power, and in many human [con]texts, these discourses are linked to another realm of mystery, to spirituality and religion. Anthropologist Anna Tsing suggests the human endeavor of science often perpetuates "stories about human mastery" inherited from monotheistic religions. In her *Environmental Humanities* article "Unruly Edges: Mushrooms as Companion Species" (2012), Tsing encourages readers to define human nature *as* an interspecies relationship and thus escape unproductive mastery (and mystery) narratives that "fuel assumptions about human autonomy and the direct question to the human control of nature...or the human impact on nature" (144).

In a characteristically human gesture to move from mystery to mastery, consider flight. Starlings are biologically inclined to flock together, and follow each other, in a specific manifestation of embodied knowledge which humans will never be able to experience, if even comprehend, much less master. Our inability to experience actual flight as birds does not deter us from studying birds' bodies extensively to model them in biomimetic designs, and fashioning planes, robots, and other practical and creative projects based on this research. In fact, the National Aviary in Pittsburgh, PA recently launched a virtual reality simulation called "Fly Like a Bird," presented in partnership with the Pittsburgh International Airport, to give patrons a mock experience of flight from the comfort of a machine. From the website:

> Lie on the simulator chest down, flap your arms using hinged wings, controlling direction and speed of travel while a fan simulates headwinds and flying speed. Motors and actuators tilt and dip your body in response. The sensory-motor coupling essentially tricks the brain. Between the motion, wind, sound and visuals, you are effectively flying! A large monitor allows spectators to witness what you're experiencing.

Through such virtual, artificial simulations, humans bring together art, science, technology, and nature to build unique multisensory experiences and invent multispecies perspectives. Some simulations offer individual first-person experiences, as with the Aviary installation. Other simulations with broader applications have been inspired by bird flocks, such as Craig Reynolds' groundbreaking 1986 Boids, abbreviated from "bird-oid objects," an artificial life simulation program designed to mimic the flocking of birds. In his article published the following year, "Flocks, Herds and Schools: A Distributed Behavioral Model," Reynolds describes the fundamental components of modeling a murmuration, marking the three central tenets the simulated bird-like objects follow in relation to their flock-mates without collision as separation, alignment, and cohesion. His model has used to generate realistic film footage of animated flocks, research in swarm robotics, and more.

Recent research in the mathematics of murmurations has further illuminated that starlings stick together not by following a primary leader but by consistently mimicking the movements of their seven closest neighbors. Half an hour into his public lecture on "The Seventh Starling: The Wonders of Collective Animal Behaviour," Italian physicist Andrea Cavagna asks, "why seven?" and quickly admits, "we don't know." He wonders if seven is a cognitive limit, as researchers have found pigeons could be trained to distinguish between numbers of grains up until the number seven, but not beyond, "no matter how severely you punish the pigeon to train him." He wonders if "this number optimizes something," but reiterates that it is an open mystery.

Cavagna's wonderful talk can be found on YouTube in full (uploaded in 2015 by Institut Henri Poincaré), and is a gift of a research artifact to behold not only due to subject matter but the ironic rhetorical dilemma of his situation. After being explicitly invited to give a public talk, Cavagna arrived to realize only two members of his audience were not trained professional scientists. He bemoans, "They're asking me to give a very elementary talk for a very qualified audience," and during his introduction to starling flocks as collective behavior, he begins in the way he imagines a public talk should go: "People have been fascinated by this kind of behavior for a very long time. We all think that the first [person who asked]...reasonable questions about this phenomenon was Pliny the Elder…" He looks up at the audience here to offer an apologetic aside of, "This is a classic comment you do in a public lecture while scientists don't give a damn about these kinds of things…"

Indeed, as the non-scientist studying the scientists from behind my screen, I was grateful for these moments of levity, and for the clarity provided by "elementary" explanations of his theoretical work. Cavagna first published his research on "The Seventh Starling" in

collaboration with Irene Giardina in 2008, and in the abstract, they write,

> The strongest impression is of the flock as an entity on its own, something more than the mere sum of its individual constituents, the birds...Yet this collective behaviour stems from some simple rules of interaction between the individuals: stay close to your neighbours (but not too close!) and align your velocity to theirs. There is neither a central coordination (a leader), nor any "collective intelligence" but a distributed behaviour, from which coordination emerges. This is the essence of self-organisation.

In "Scale-free Correlations in Starling Flocks" (2010), Cavagna, et al. continue to use complex calculations to contend with the question of how starling flocks emerge, and how regardless of how massive these flocks become, the magic number of seven remains the same. These scientists are several working with a larger STARFLAG ("Starlings in Flight: Understanding Patterns of Animal Group Movements") organization based in Italy and funded by the European Commission. Another team, led by physicist Alessandro Attanasi, published on the "Superfluid Transport of Information in Turning Flocks of Starling" in 2013. Their "novel theory" have found the swift, efficient turns of starling flocks "to be mathematically identical to that of superfluid transport in liquid helium"—and believe this "equivalence between superfluid liquids and turning flocks is a compelling demonstration of the far-reaching consequences of symmetry and conservation laws across different natural systems" (Attanasi 1).

Development of advanced technology capable of image-recording and freeze-framing starlings in flight has facilitated massive advancements in murmuration research. There are still many mysteries to solve, but flocking science has come a long distance since its early days—such as when ornithologist Edmund Selous published in 1931 a theory suggesting bird flocks communicated through telepathy in a book interchangeably transcribed as *Thought-Transference (or What?) in Birds* and *Thought-Transference (or What!) in Birds*.

Many writers continue to interrogate the strange sublimity of starlings' moves in lyrical

modes. Noah Strycker dwells on similar questions where he muses, "Starling flocks certainly seem to arise from a vibrant, intricately choreographed essence of life itself, a force that defies understanding. How can a hundred thousand birds zip around at 30 miles per hour, each mere inches from the next, and maintain a cohesive flock while constantly shifting direction?" (31). In addition to citing scientists, Strycker connects murmurations to economist Jeffrey Goldstein's concept of "emergence": "the arising of novel and coherent structures, patterns and properties during the process of self-organization in complex systems" (Goldstein qtd. in Strycker 31-2). Strycker reiterates again how, "Starling flocks, which coalesce from the aesther, fit this definition perfectly" (32).

In her award-winning essay on "Starling Song: Murmuration of Meaning," delivered as a Hay Lecture in 2017, Rachel Dowse writes, "When a flock turns in unison, it's a phase transition." Rather than expounding on the scientific nature of phase changes (i.e. the theories of superfluidity mentioned above), she takes a poetic turn to explain: "The beautiful fact is that it's these tiny mistakes in movement each bird makes when copying its neighbors which causes the shifting patterns. If each bird imitated its partners perfectly, all the movement would be lost. Instead, small mistakes by one individual ripple out as others copy it…the beauty comes from the lack of perfection."

I love this explanation—the acknowledgement that what makes a murmuration sublime is the way in which its beauty is derived from imperfections, from mistakes. While Dowse does not mention the Japanese concept of wabi-sabi here, her sentiment is reminiscent of beliefs at the heart of this Eastern worldview rooted in Zen Buddhism. I gesture to wabi-sabi here because it is a philosophy which embraces the beauty of imperfection, impermanence, and incompletion. It is, after all, the imperfect and impermanent nature of murmurations that renders not just their

physical movement but the affective ways in which they move humans. Furthermore, as humans, we are inevitably limited to an imperfect and incomplete understanding of the nature of the flocks, which further fuels our wonder over the aesthetics and functions of their moving forms.

Wabi-sabi is not just useful as an embodied knowledge to consider in conjunction with murmurations, but also the writing classroom; embracing imperfection and flux is essential in both wabi-sabi living and composition pedagogy. This being said, one of the central tenets of wabi-sabi is the impossibility of articulating wabi-sabi in rational written form, as it is supposed to be felt as an emotional experience, rather than as an idea; wabi-sabi is an affective tradition, not an intellectual one. (The related concept "mono no aware" is defined more specifically in the *OED* as "the experience of being, deeply and spontaneously moved by various poignant manifestations of nature, including human nature; esp. a sense of pathos arising from intense awareness of the impermanence of earthly things"). Few English-language books have tackled these subjects fully from what I've found, and all who have tried to tackle it have filled their books with disclaimers for their efforts.

One of the most effective is *Wabi Sabi* by Mark Reibstein, a gorgeous children's book featuring collage art by Ed Young and further decorated with translated 17th-century haikus by Matsuo Basho, translated by Nanae Tamura. Another ambitious curiosity is *Wabi-Sabi for Artists, Designers, Poets & Philosophers,* a slim text by Leonard Koren, the aesthete responsible for founding the absurd *WET: The Magazine of Gourmet Bathing* in the 1970s.

A true practitioner of wabi-sabi might argue that it has no place in a dissertation on Western culture—a mode of writing that is so concerned with establishing concrete mastery of a discipline. However, it still feels worthwhile to note how the embodied experience of writing of a dissertation is often described in similar ways (or at least it has been to me, by word of mouth):

as perpetually imperfect, theoretically impermanent, and intellectually incomplete, even as the technical completion of it marks the completion of a terminal degree.

*

Returning to the human science of starling flocks, in addition to the question of *how* starlings flock, there are thinkers who are more concerned with *why.* First and foremost, collective behaviors such as the form-following of a starling swarm are thought to foster survival; as with schools of fish, murmurations distract and deter predators. Solo starlings can easily be snatched by larger birds as prey, but the dynamic force of the collective can confuse and deter predators. The instinctual logic behind murmurations is believed to be multifold; some scientists suggest the close vicinity of birds in flight keeps them warm and facilitates communication.

Then, there are those who want to beyond *how* or *why* starlings behave the way they do to figure out how starling logic might inform our knowledge about human behaviors. Researchers concerned with how concepts central to non-human animal "swarm intelligence, this ability to make decisions, to carry out computations that exist only at the level of the group," have suggested "they can also give a pretty good approximation for what groups of humans will do in a kind of panic or crisis" (Yong). Studying the behaviors of starlings and other wildlife have allowed scientists to come to conclusions about human instincts and ways of knowing, constructing, and navigating our environments. Contemporary starling murmuration research tends to bring together careful efforts of citizen and professional scientists alike, and as it turns out, learning from starlings en masse is a more thankful and generative task than attempting to exterminate them.

*

Myths & Realities

Jeff Karnicky writes in *Scarlet Experiment: Birds and Humans in America* that the European starling is both the most common and the "most frequently exterminated bird in America because, in part, of this proximity to humans" (45). The government has spent over a million dollars trying to control starlings without success, and the populations reproduce rapidly enough to render the pest control methods invented and implemented relatively useless. The efforts, however, have required a good deal of human creativity.

As early as 1925, "Roman candles have been...Discharged into trees laden with sleeping birds" (Chapman). A more recent attempt to keep national monuments clean in Washington DC involved having the White House fitted with speakers that "buzzed owl calls," while the Capitol set up live wires around columns to deter starlings from landing. These are methods still commonly used, which have been supplemented by more untraditional methods through the years, some nearly as strange as the stories of the starlings' introduction (Marche).

In one creative 1914 effort, citizens of Hartford, CT, fastened teddy bears to trees to stop starlings from nesting in them, and then fired skyrockets to scare off remaining birds. The strategy was abandoned after neighbors could no longer endure the noise (Zielinski). In the 1930s, the federal government supposedly disseminated starling pie recipes to convince Americans to eradicate starlings by eating them. After failing to make starlings popularly palatable, people began enticing starlings to consume poisons. In 1967, Starlicide was registered in the United States as a chemical pesticide developed to poison starlings without doing damage to other species, yet even this targeted delivery has barely dented the mighty starling population (Lund).

*

As alluded to much earlier, literary lore faults New Yorker Eugene Schieffelin's zeal for William Shakespeare's works as cause for the overpopulation of European starlings in the United States today. The oft-repeated story claims the eccentric drug manufacturer sought to introduce every bird species mentioned in Shakespeare's writings into Central Park. Purportedly to reify this vision, but even if not, the fact remains that Schieffelin coordinated two releases of European starlings, one batch in 1890 and another in 1891, totaling about a hundred birds in all. The starlings settled and nested in the eaves of the American Museum of Natural History, to the delight of Schieffelin and his team at the American Acclimatization Society. Starlings were one of the only bird species of many they released to survive at all. Joy over the starlings' success turned to terror when the birds began to reproduce aggressively, and damage local buildings, farmers' crops, habitats of native species, and more. The birds were released on human whim, and now defy human control. The Lacey Act was introduced in 1900—a decade too late to stop starlings—to "ban the importation of animals that could threaten people, industry, or the environment" (Keyes and Karp), or in the language of the original document, "*injurious* mammals, birds, fish," etc. (Lacey Act, emphasis added).

The ancestors of Schieffelin's swarm continue to thrive and are now estimated to number over two-hundred million birds found across the American continent today. The origin story linking Schieffelin and Shakespeare has strangely thrived, too, and for decades has been presented as an unquestioned yet unsourced fact in a range of academic and journalistic articles featuring starlings. The unlikely origin story is often prosed in a manner so matter-of-fact it reads more as common knowledge than apocryphal lore.

Over a dozen *New York Times* articles published over the last half-century link starlings to Shakespeare with neither question nor disclaimer suggesting it might be myth. Plentiful

publications recognized for being reliable, regardless of political agenda, from *Scientific American* to *Smithsonian Magazine*, *BBC* to the *Washington Examiner*, have published stories tracing America's population of European starlings back to Shakespeare's influence on Schieffelin. Many of the authors are quick to judge Schieffelin's plan, but none appear to fact-check whether such a plan ever existed in the mind of Schieffelin, or whether it was the invention of another creative writer.

Similar to how starlings create memorable patterns by following each other imperfectly, humans are prone to infusing our own favorite stories with wishful thinking, loose sourcing, and aged memories, and passing them down a bit twisted. Facts and fictions are often hybridized as we circulate tales with their roots in truth—sometimes this results in lasting lore, mythic art, and curious cultural growth. In darker scenarios, murmurative trajectories can be seized to fuel political corruption—consider the contemporary discourses around "alternative facts" and "fake news."

*

The obituary of Eugene Schieffelin (1827–1906) found in *The New York Genealogical and Biographical Record, Volume 37* remembers the man for being "the first to import English sparrows into this country—his purpose being to exterminate the caterpillars which infested the trees in Madison Square where the Schieffelin home was. He imported and liberated many other species of birds, among them the starling." His obituary in the *New York Times* makes no mention of his avian activities.

Eugene Schieffelin was, however, without a doubt responsible for importing a variety of birds in his lifetime. He was one of the founding members as well as the chair of the American Acclimatization Society in New York, chartered on April 20, 1871 with a goal to the

foster the "introduction and acclimatization of such foreign varieties of the animal and vegetable kingdom as may be useful or interesting" (*Laws of the State of New York,* Volume 2, p. 1328). It is also true that James Edmund Harting published *The Birds of Shakespeare* in the same year, and entirely possible Schieffelin could have read it.

Charles Mitchell is one of the few contemporary writers who has attempted to draw out deliberate connections between Schieffelin and Shakespeare, in "The Bard's Bird; or, The Slings and Arrows of Avicultural Hegemony: A Tragicomedy in Five Acts." Published both in *Trash Animals: How We Live with Nature's Filthy, Feral, Invasive, and Unwanted Species* and in the digital *Terrain*, Mitchell's essay makes some ambitious claims, assuming, for example, that since Shakespeare's popularity was dwindling in America at this time, and Schieffelin was a fan of the Bard, he "would certainly have been troubled to read Wheeler's account of Shakespeare's looming extinction" in 1890, and been familiar with Harting's "exhaustive survey, with engravings" on Shakespeare's birds (173). While Mitchell does not cite primary sources demonstrating Schieffelin's enthusiasm for or knowledge of these specific Shakespeare texts (or Shakespeare more generally, but this is safer to assume), he does make some compelling interpretive moves based on secondhand sources to posit the feasibility of this tie. Mitchell writes,

> Schieffelin hoped to fashion an avian context for a fuller appreciation of Shakespeare's plays. The creation of Shakespeare gardens in the late nineteenth and early twentieth centuries had a similar purpose: to make Shakespeare's work seem less foreign to a modern audience by providing a picturesque showcase of all his featured flora. But Schieffelin, it seems, was aiming for something more than a park full of Shakespearean tableaux. If the masses could not be induced to hear Shakespeare in the theater, then perhaps they might be seduced by the sounds of Shakespeare's birds in the park (173).

In the author's note on sources, Mitchell admits that he first encountered the story of Schieffelin's starlings in Annie Dillard's *Pilgrim at Tinker Creek,* who credits Edward Way

Teale's article from 1947. In my own research, I've found that while Teale was a popular naturalist, his article "In Defense of the Pesky Starling," published in a general interest digest called *Coronet,* did not offer any citations at all.

Mitchell also notes that Teale's story has since appeared "with minor variations regarding the number of pairs released, the exact date of their release, and whether there were one or two releases—in environmental history texts, field guides, and online birding sites." After more digging, he believes ornithologist Frank M. Chapman's works "appear to be the original sources for the story," with "List of Birds Found within Fifty Miles of the American Museum of Natural History" (American Museum Journal, vol. 6, no. 3, 1906) and "The European starling as an American Citizen" (Natural History, vol. 25, no. 5, 1925)." When I inspected these sources, I again found no mention of Shakespeare at all in either of them.

Chapman's articles do, however, confirm that starlings were introduced several times to the United States, "but only the last importation appears to have been successful…in Central Park, under the direction of Eugene Schieffelin of this city" (Chapman 1906). In his 1906 piece, Chapman appends, "To the above statement, which stands as it appeared in the first (1894) edition of this List, may be added the further information, obtained from Mr. Schieffelin, that 80 Starlings were released on March 6, 1890, and 40 more on April 25, 1891.

In the latter (1925) article, he writes:

> It is a singular thing that both the starling and English sparrow were introduced into New York City by the same person. Impressed by the abundance of birds in England and by what he believed to be their comparative scarcity in this country, Eugene Schieffelin determined to make good the deficiency. Inspired by the highest motives, he might, under proper direction, have become the father of bird conservation in America and have saved for us species we shall never see in life again. But like many another pioneer reformer, he blazed a false trail. Organizing and incorporating at Albany a society for the importation of foreign birds into New York State, he followed the introduction of the house sparrow with that of song thrushes, chaffinches, 480 bullfinches, skylarks, nightingales, and finally the starling. Only the first and last of his

> attempts to transplant European birds to our shores were successful and in them he took no small amount of pride. (479-80)

Chapman does not clarify what "highest motives" Schieffelin may have been inspired by. Mitchell does call the American Acclimatization Society "a dissertation topic waiting to be discovered" (indeed), as he was "unable to discover any narrative history" about the group. There are two historical sources Mitchell does not mention, both from the *New York Times.* The first is a meetings minute published by the Society in 1877, and the other is a Letter to the Editor Q&A from 1900—perhaps an oversight, or perhaps because they also do not resolve the mystery.

In 1877, the group's meeting minutes say a Mr. Conklin "read a paper on acclimatization, with special reference to birds," in which he "detailed the efforts made this country to introduce foreign birds." The write-up mentioned "some starlings" freed the past July, and how it was "expected they would all prosper" *(New York Times).* Several secondary sources confirm there was an earlier, less successful starling launch, and on March 1900, E. Brown wrote to the *New York Times* editor:

> Can you inform me what sort of bird…frequents this neighborhood, answering closely the description of a starling, viz., brown plumage, penciled, and darker on head than body; beak about one inch long, and rich yellow color; tail rather short, and legs rather long? Do you know of any foreign birds having been liberated in this city besides sparrows, and by whom? Research has so far failed to identify these birds.

The editor passed the question to naturalist William T. Davis, who assured Mr. Brown that he was looking at starlings, and a "flock of about forty starlings was liberated by Mr. Eugene Schieffelin in Central Park in March, 1890. A pair of these birds built their nest in the roof of the Natural History Museum…in 1892" (ibid).

It has taken some digging to uncover reminders of the power of apocrypha, buried under the gloss of splashy headlines. Regardless of which source I consult, too, there are still gaps in the story—slight variations of the number in birds, of the exact dates, of Shakespeare's influence

or lack thereof. The few who have latched onto the lack of evidence in this claim have been a handful of devoted bloggers. Some of the most thoughtful and deliberate archival investigation on the topic can be found, of all places, on Reddit/AskHistorians. A fan-blogger who calls himself "Shakespeare Geek" can be seen trying to deter—or at least add a disclaimer to—the still-frequent circulation of this story as fact on Twitter.

As communication scholar Damien Smith Pfister writes in "'A Short Burst of Inconsequential Information:' Networked Rhetorics, Avian Consciousness, and Bioegalitarianism," Twitter is a platform "explicitly modeled on avian communication," and "can be understood as circulating information in ways analogous to the contact and assembly calls of birds" (Pfister). Thus, it felt apt for me to conduct some of my research through Twitter. As part of my research process, I pinned to my own Tweetdeck a column actively retrieving all Tweets featuring both "Shakespeare" and "starling," and at least a handful of new announcements surface each month. In late March 2018, a surge occurred when *Aeon* released a short art documentary on this exact subject called "The Commoners." The stylized film was introduced with the subtitle of "The Manifest Destiny of Starlings. How a Nod to Shakespeare Unleashed an Avian Conquest." Directed by Jessica Bardsley and Penny Lane, the project lacked deep fact-checking but generated hundreds of new social media shares.

Academic Harriet Ritvo wrote an entry for the National Humanities Center's "On the Human" blog, calling the story "widely reported, although occasionally doubted," noting one "simply quantitative" reason for doubt, which is that "the Bard mentioned well over fifty species, not all of them native to Britain." The Library of Congress blog has a guest post, in which archival expert Abby Yochelson notes:

> It seems about once a decade *The New York Times* produces an article on what a menace starlings are with other cities' newspapers chiming in on the problems these birds have

caused. Virtually all of these articles allude to Eugene Schieffelin's idea of introducing birds mentioned in Shakespeare's works. Dozens of books and articles perpetuate this notion, though a few of the sources say this connection has never been verified.

It is often in footnotes and marginalia that this is clarified. Peter Coates, too, asserts the connections between Schieffelin and Shakespeare in the body of his book, only to admit in an easily-missed endnote, "The popular literature is riddled with unsubstantiated references to Schieffelin's impulse" (Coates 209). He reminds readers of the also-important fact that "earlier attempted introductions had nothing to do with Shakespeare, and there would undoubtedly have been further efforts independent of Schieffelin's whims had his releases also failed" (ibid).

I wish I could believe starlings were introduced to the United States due to Eugene Schieffelin's passion project to release every bird found in Shakespeare's writings. I re- started writing my dissertation at least three times, each with this premise in the lead, and each time being able to find no single piece of verifiable primary documentation confirming this connection. This piece of apparent birding folklore, disguised as a factoid, has run as rampant as the starlings themselves. From books about birds to popular media articles, YouTube videos of starling owners teaching their birds to say "Shakespeare," to a range of publications, from *The New York Times* to *Smithsonian Magazine, Wired, BBC*.

Nearly every journal which has published a story about starlings has included this "fact" without question to its origins; there are only a handful of exceptions. Perhaps it is too minor a fact to confirm nor deny, or perhaps it is too alluring a legend to quash. *Everyone hates starlings,* one might argue, so the Shakespearean connection puts a positive spin on their presence. It gives us something to find delightful about starlings, or at least a memorable (and/or pestilent) story to share.

*

Mimicry

What can be confirmed about Shakespeare is that he was enthusiastic about writing about birds—yet he only mentions starlings once, when a single hypothetical starling in *Henry IV* stars in a character's revenge fantasy. Fuming over the king's treatment of Mortimer in Act One, Scene Three, Hotspur imagines acquiring a starling and exploiting its power of mimicry to provoke the king's perpetual fury—

> He said he would not ransom Mortimer,
> Forbad my tongue to speak of Mortimer.
> But I will find him when he lies asleep,
> And in his ear I'll holla "Mortimer."
> Nay,
> I'll have a starling shall be taught to speak
> Nothing but "Mortimer," and give it him
> To keep his anger still in motion.

What else can be confirmed is that this tale's retelling has been inspired, embodied, and circulated across multimodal forms. One of most startling can be found in a video artifact where a modern starling owner trained their bird to mimic "Shakespeare" (albeit a bit garbled as "Shakes-beard"). Witness this unassuming treasure of contemporary media on YouTube by "Nature On The GO! LLC" (my description cannot do it justice), with the deceptively simple title of "European Starling mimics words ('Talking' Starling)."

With a lilting fiddle tune playing in the background, the video opens on a black background with sans-serif white text announcing, "This is the story of a European Starling that mimics words relevant to the species' invasive introduction to the North American continent." The starling's common life story is recapitulated in onscreen text imposed on an image of the baby bird found in Michigan in May 2015, raised after no wildlife rehabilitators would rescue it due to pest status (I use the pronoun "it" here to match the language in the video realizing fully the problematic nature of referring to a living organism as "it").

Here, the video cuts to the organization's logo screen, "Nature on the Go!" with cluttered dragonfly-clip-art-adorned text in light green and brown on a sky-blue background. Viewers are told the Michigan-based nature education organization decided to raise the bird as an "Animal Ambassador." Live video of the feeding and squawking bird begins at last, and at one-minute and twenty-three seconds, now late July, the bird has begun to grow in its starry adult plumage. By December, the bird is learning words.

The video scribe then captions a dilemma with their ideal solution: "Not wanting the bird to be some sort of novelty act, yet recognizing its growing vocabulary, we guided the bird to mimic phrases relevant to the species introduction to the North American Continent." They cut to the scene of the bird babbling its name, "European starl-ing," with a sing-song rising inflection on the final syllable. Next, the bird clearly articulates "Central Park, New York City" and follows up quickly with a chirpy, muffled "Shakespeare!"

Here, after what might be construed as the video's climax, smooth violin music is cued along with final fact captions: "In the wild, individuals can learn the calls of up to 20 different species of birds." The video links to the Cornell Lab of Ornithology entry on starlings and ends with a thank you screen. The film is six seconds over three minutes, has a respectable 34K views, and just over 200 "likes"; if it were not so earnest in its presentation as an educational video without a "novelty act," its content could easily go viral.

The careful distinction here of "Talking" is worth attention, as if the organization wants to clearly distinguish between a bird's ability to mimic, to simply copy, versus to talk, or to communicate in a semantically rich manner. People have been exploiting the mimicry skills of starlings since ancient times; they are capable of copying human speech to uncanny degrees, rivaling (and sometimes surpassing) popular parrots in talent. While teaching starlings to "talk"

in several languages, the ever-present Pliny also shared insights into the specifics of standard starling pedagogy in *Natural History:*

> At the moment that I am writing this, the young Cæsars have a starling and some nightingales that are being taught to talk in Greek and Latin; besides which, they are studying their task the whole day, continually repeating the new words that they have learnt, and giving utterance to phrases even of considerable length. Birds are taught to talk in a retired spot, and where no other voice can be heard, so as to interfere with their lesson; a person sits by them, and continually repeats the words he wishes them to learn, while at the same time he encourages them by giving them food.

By Shakespeare's day, it was likely common knowledge that starlings could mimic human speech, but due to the wildness and repellant representation of starlings today, Lyanda Lynn Haupt believes many contemporary people are surprised to find this is true. Returning to Haupt's book, she writes extensively and engagingly about the process of teaching her own starling, Carmen, to speak and sing. Evidently, the most difficult challenge was convincing her bird to master the words and tunes (namely, Mozart's) she chose, because the bird had a will of her own. As a writer, Haupt's reflections on the process of composing both about and with a starling are especially fascinating. Note these two moments, first at the beginning of the book,

> This book would have taken me half as long to write if it were not for one fact: most of it was composed with a starling perched on my shoulder...Sometimes she was nudging the tips of my fingers...defoliating the Post-it notes from the books where I had carefully placed them to mark passages essential to the chapter I was working on—she would stand there in a cloud of tiny pink and yellow papers with an expression on her intelligent face that I could only read as pleased…" (2).

...and later on,

> She loves to ride on my hands while I type...she loves to flap, jump, and scamper across the keyboard. She tries to wedge her bill between the keys and the board...Occasionally her editing has improved a sentence, deleting one of the superfluous adverbs to which I am prone (112).

Haupt's project is focused on Mozart's biography—and specifically, the pet shop starling the composer acquired on May 27, 1784 after he noticed it singing his "latest piano concert, in G

major K453," which had not yet been published. She conducts painstaking amounts of research to consider how this might have been possible, and explores how Mozart's subsequent and "notably atypical K522, titled A Musical Joke," might be "in imitation of the starling's apparently disjointed mimicry" (McEwen).'

In 1990, animal behavior scholars Meredith West and Andrew King conducted a small but formative study on starling song, noting that despite a "wealth of anecdotal information, few scientists have studied the vocal behavior of starlings under the conditions necessary to separate fact from fiction" (West and King 106). Studying these birds in the wild is difficult in part because they "vocalize too much, too often, and in too great numbers, sometimes in choruses numbering in the thousands" (ibid). West and King's study examines starlings kept in the household. They sought to experiment on one particular aspect of the starling story, by exploring "how members of a mimetic species develop species-typical calls and songs," in addition to "individual idiosyncrasies." They ask, "Why does one starling mimic a goat and another a cat? Given the abundance of sounds...what processes account for the selection of models?" (107).

Because human speech is distinct to us, the scholars found it "easier to trace a bird's repetition of a human phrase" (ibid). They studied a small sample of fourteen starlings kept in diverse types of human contact. One group's birds were treated as pets in the home, another few were kept in "limited contact with humans in cages in the house," and the final group "were kept in auditory contact on a screened porch aviary." As it turns out, "only the birds in interactive contact mimicked sounds with a clearly human origin" (108).

In another notable experiment, researcher Timothy Gentner trained starlings to refute Noam Chomsky's controversial thesis that only humans are capable of recognizing and utilizing recursion in language. (See "Recursive Syntactic Pattern Learning by Songbirds" in *Nature,*

2006, by Gentner, et al.). Haupt remarks on the irony of how starlings can teach us so much while being "so unwanted by the wider world Gentner didn't even need a wildlife permit for his research assistants to nab them from the trees" (Haupt 158).

While starling may be labeled as vermin in the streets, their easy trainability and commonality make them valuable for knowledge formation in the academy, and as a result, they have starred in a strange range of projects. One memorable 2008 article by Robert Highfield reported, "Starlings can tell if you are watching them, according to a study that has shown for the first time that starlings respond to a human's gaze." Indeed, a team of scientists led by Julia Carter published "Subtle Cues of Predation Risk: Starlings Respond to a Predator's Direction of Eye-Gaze" in the 2008 *Proceedings of the Royal Society Biological Sciences*, where the starlings are framed as prey, with humans gazing on them as intentional predators. This sort of work brings to mind and perhaps lends new dimensions to readings on animal gaze, recalling the discourses Jacques Derrida ponders in his classic "The Animal That Therefore I Am."

*

Murmurs

"What we are trying to define, because the experience is almost lost,
is the universal use of animal-signs for charting the experience of the world."
– John Berger, "Why Look at Animals" (1980)

Human language is continually shaped by an expansive constellation of factors from our relationships to one another, to non-human animals and the environment, to our experiences navigating the world at large. Humans exist in worlds crafted to suit the needs and desires of those with the influence and means to partake in their shaping, within the constraints and framework of a natural world which we constantly seek expertise and control over. These human patterns of creating language and life result in myriads of murmurations.

While it is simple and accurate to refer to a group of any animals as a mere "group," it is rhetorically significant for our everyday language to regularly recognize a starling group as a murmuration, a crow gathering as a murder, ravens in an unkindness, and so forth. The language of "murmuration" in Western culture in relation to starlings emerged in a list of words found in a 15th century text with fascinating implications on masculine poetics and pedagogy: *The Book of St. Albans.*

The family of group terms "murmuration" and its siblings belong to ("collective noun" is likely the most common) can be called 'nouns of multitude,' 'company terms,' 'nouns of assemblage,' 'collective nouns,' 'group terms,' and 'terms of venery'" (8). As James Lipton notes in his introduction to *An Exaltation of Larks, or, The Venereal Game,* "compilers of the numerous lists of these words, though obviously enthusiastic philologists…never felt compelled to settle on a group term for them" (ibid).

The Book of Saint Albans, published in 1486, is by all accounts the first definitive text to amass these terms, and is also mired in apocryphal controversy; it is unclear whether the text is a compilation of commonplaces by various compositionists or the product of a single author. First editions of *The Book of Saint Albans* are rare, and documentation around the original publication is sparse, but this popular medieval guide to gentlemen's hobbies—with treatises on hawking, hunting, and heraldry—has been republished and circulated with fresh prefaces each edition for centuries. In each, there is only one writer explicitly named, and the name controversially belongs to a woman. The oft-questioned Dame Juliana Berners is another entity whose biography is mired in murmurations—that is, in rumors, in a complex attributional mystery which might never be solved. (Unsolved mysteries are a theme of this project).

In the introduction to William Blades' 1881 facsimile edition of *The Book of Saint*

Albans, he notes that only the second treatise, the essay on hunting, can be reasonably credited to Berners, due to the "express statement at the end of the twenty-fourth page," a sort of signature, marking, "Explicit Dam Julyans Barnes" (Blades 8). As for who this woman was, Blades believes, "What is really known of the Dame is almost nothing, and may be summed up in the following few words. She probably lived at the beginning of the fifteenth century, and she possibly compiled from existing MSS. some rhymes on Hunting" (13). He traces the intertwined stories other writers have tried to craft about Berners' life and family history, before dismissing them impatiently with, "But enough of such sham biography; let us return to facts" (11). Juliana Berners appears in the *Dictionary of National Biography, 1885-1900, Volume 04*, in an entry by Morgan George Watkins, who calls Blades "one of the latest and most destructive of Dame Juliana's biographers.

The idea of a female author is especially rejected here because the terms were developed in the Middle Ages to further a pragmatic and explicitly discriminatory agenda—as a way for men to discern noble hunters from peasants, who did not have access as easily to books and other influences from which they might learn the more specialized vocabulary of the hunt. Some have rationalized that the woman writer is a mother or teacher figure who is driven by the imperative to teach young boys to memorize this necessary hunting vocabulary. Since the hunting section is the only one of the book written in verse, in addition to being penned by a woman, some believe this was a deliberate way of making the text accessible and easy to memorize for young boys.

The specificity of the terms is notable, and some species groups even have subsets of behavior-specific terms. Geese—the animals from which most quill pens were sourced, and which we will return in depth to discuss in the next chapter—are grouped as a familiar "gaggle" on land, a "wedge" when airborne in a V-formation, or generally as a "skein" in the sky.

According to the *Oxford English Dictionary,* "gaggle" was only one of "many artificial terms invented in the 15th c. as distinctive collectives referring to particular animals or classes of persons; but unlike most of the others, it seems to have been actually adopted in use."

Many of these "artificial terms" are explicitly and derogatorily gendered, including ones in actual use today. "Gaggle," for one, derives from multiple onomatopoeic origins as well, and is synonymic to the cackling or gabbling of geese, with a sub-definition denoting "derisively, a company (of women)" (*OED).* Birds and women were, and are, often symbolically interchangeable—a "bevy," too, refers to quail and women both. In the chapters that follow, each will home in on another of these collective terms, and explore their cultural and rhetorical contexts, their polysemic possibilities, their problems, and more.

*

Afterword

"On one classic occasion, so many starlings perched on the minute hand of Big Ben that they prevented it from striking 9 o'clock." – Jeffery Boswall, The Private Life of the Starling

A murmuration literally stopped time one day in 1949 when starlings paused on the minute-hand of Big Ben's clock face for nearly five minutes—this is, at least, reported across sources to the extent that it is unclear which specifics are accurate, which are embellishments, and where either emerged. These strange-but-supposedly-true facts stay with us so readily that we want to believe them and might experience a sense of deflation if it turns out they're untrue. Thus, murmurations, in their early definition as rumors, often play a role in evoking wonder, in reveling in mystery, instead of mastery.

In some cases, borderline fictions and questionable facts can operate productively in the world to buoy curiosity, inquiry, and creativity. In some contexts, and depending on content, they can be downright dangerous; again, consider the current American political climate and

media battle with “alternative facts” and “fake news.” I spend substantial time in my writing classrooms teaching my students to become informed about source reliability, and to fact check across forums, across forms of expertise.

Murmurations serve as a limitless learning tool, and the richness of starling-centric literature is something I continue to learn new things about daily. As I was completing the first draft of this chapter, I took a break to meet a potential job candidate in our English department who referred me to a poem about starlings I had somehow missed before. I leave it here as a breadcrumb, as another moment of imperfection and incompletion. In fact, I will leave with two poems, the latter of which I originally intended to lead with. This will give us a place to return to, to mark that this is only the beginning.

*

A Plague of Starlings
(Fisk Campus)

Evenings I hear
the workmen fire
into the stiff
magnolia leaves,
routing the starlings
gathered noisy and
befouling there.
Their scissoring
terror like glass
coins spilling breaking
the birds explode
into mica sky
raggedly fall
to ground rigid
in clench of cold.
The spared return,
when the guns are through,
to the spoiled trees
like choiceless poor
to a dangerous
dwelling place,

chitter and quarrel
in the piercing dark
above the killed.
Mornings, I pick
my way past death's
black droppings:
on campus lawns
and streets
the troublesome
starlings
frost-salted lie,
troublesome still.
And if not careful
I shall tread
upon carcasses
carcasses when I
go mornings now
to lecture on
what Socrates,
the hemlock hour nigh,
told sorrowing
Phaedo and the rest
about the migratory
habits of the soul.

– Robert Hayden

A Crust of Bread

why, I often wondered
why I was a poet,
first of all

most of all, I wanted
to have been a bird
if I could have been a bird

but I wanted the starlings
to have been fed,
first of all

– Alfred Starr Hamilton

3.0 Gossamer Skeins to Gooseflesh[1]

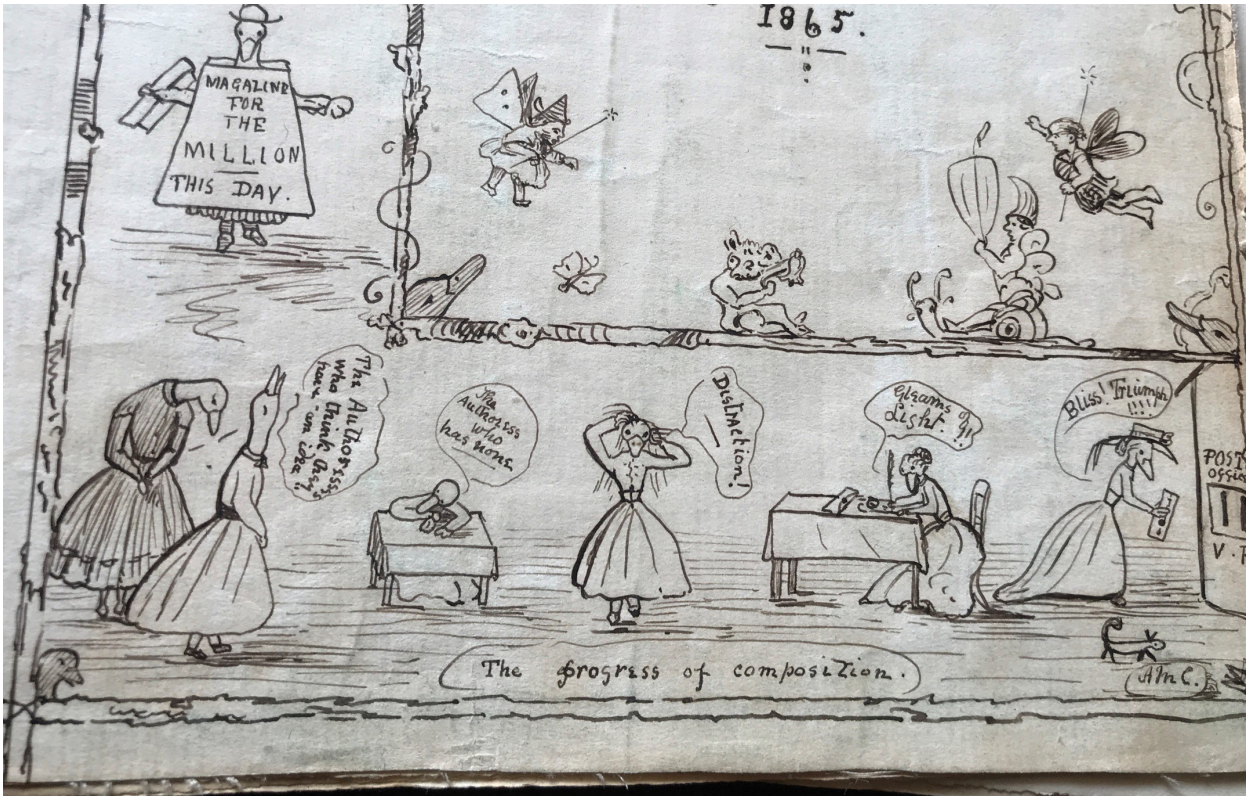


Figure 2: "The Progress of Composition" detail from "The Barnacle" (June 1865)
By kind permission of the Principal and Fellows of Lady Margaret Hall, Oxford

[1]I took this image in the Lady Margaret Hall Library at Oxford University with permission from James Fishwick, but initially became fascinated by this detail when it was featured as Figure 6 in Georgina O'Brien Hill's "Goosedom," where she shares the following image description: "In 'The Progress of Composition' (Figure 6) the young contributors are depicted as developing through the difficult stages of authorship, eventually ending in the hopeful delivery of their manuscript to the editor. Proudly holding her head aloft on the left of the image is 'The Authoress who thinks they have 'an idea;' slumped over a desk with her head on her hands is 'The Authoress who has none;' tearing at her hair is the author in 'Distraction;' sitting upright with a large quill in her hand is the inspired author who sees 'Gleams of light!!' and finally, as she carries her manuscript to the post office, the author's 'Bliss! Triumph!!!!!'"

(‘>

Humans spin yarns, spiders spin webs, and gossamer as filament twines the two and serves as our next birded word. While murmurations recall flights of unsubstantiated rumors, gossamer limns “filmy” weaves, strong yet "unsubstantial” (Webster and Porter). The term was used to describe the craft of spiders prior to the craft of humans, and preceding this, gossamer was a compound term referring not to arachnid art but likely to a season for feasting upon another pest and pet bird: the goose.

At its roots, gossamer is a compounded portmanteau of “goose summer.” Most sources believe this is a 14th-century synonym for “Indian summer.” This term itself is of controversial origin and loose usage, potentially linked to Native American hunting habits, and usually referring to unusually warm and dry spells on the Northern Hemisphere in spring and autumn. Poet Geoffrey Grigson’s entry on “gossamer” in *The Shell Country Alphabet: The Classic Guide to the British Countryside* notes the “late spells of sunshine and summer-like weather” in the fall is “the time when the goose is in season after Michaelmas goose-fairs” (Grigson 175). It is also the time when these “spider threads...fly through the air,” and “fall to the ground where dew condenses on them, making a glistening net of gossamer as far as the eye can see” (175). He emphasizes the sublimity of light, hues, and shapes: “on this net one sometimes observes a hyperbola-shaped dew-bow caused by the drops catching and refracting early sunlight” (175).

Scholar Adam Sweeting devotes a section to “The Gossamer Days” in *Beneath the Second Sun: A Cultural History of Indian Summer*, reading into both the season’s etymological and entomological characteristics. Sweeting describes how gossamer webs are formed on by the “spidery flights” of miniscule arachnids (Sweeting 117). In search for food on “warm still days,”

small spiders will disperse in a method called “ballooning,” weaving parachutes of silk to travel long distances when the meteorological conditions are just right (ibid). The spiders leave behind these ephemeral gossamer webs just briefly; their transient traces are easily erased by wind.

Centuries of writers have documented their enchantment with gossamer, such as the philosophical theologian Jonathan Edwards, who mused on the “multitudes of little shining webs and glistening strings, brightly reflecting the sunbeams” in his 1723 “Spider Letter" (Edwards qtd. in Sweeting 117). Henry David Thoreau describes gossamer in depth in several entries of his *Journal* from fall of 1853. He is impressed by “gossamer lines” so fine they “are not visible unless between you and the sun,” and while he observes that spiders are responsible for these nets, he is struck by how they are “so abundant that they seem to have been suddenly produced in the atmosphere by some chemistry, spun out of air…as if that fine vapor of the morning were spun into these webs” (Thoreau). He continues by quoting from William Kirby and William Spence’s *An Introduction to Entomology*, who write that “In Germany these flights of gossamer appear so constantly in autumn that they are there metaphorically called *'Der Fliegende Sommer,'* the flying or departing summer” (Kirby and Spence qtd. in Thoreau).

Like murmurations, gossamer webs are frequently described with the elevated language of the sublime. They are compositions cited as wondrous, despite being crafted by spiders, non-human creatures often tagged and eliminated as pests. The figure of gossamer is further complicated by the strange and sticky presence of the goose embedded in its nomenclature. My second chapter grapples with gossamer webs, and plays with the tangle of terms involving, representing, and implicating the humble goose in its many iterations, including but not limited to: mythological, domestic, wild, literal, figurative, nondescript, composite. After all, if one bird were to be held responsible for promoting literacy and co-authoring literature for readers of all

ages in Western civilization (and arguably beyond), the goose would be a strong candidate. Thus, the symbolic and material forms of the goose will serve (and be served) as the winged and webbed creature central to this chapter's inquiry.

//

Brushing cobwebs from our childhood libraries, many might uncover volumes adorned with the familiar image of an old woman riding on a gander's back. Mother Goose is responsible for guiding generations of young readers through our first poems and stories, and as Muriel Rukeyser mused in a 1971 issue of the *New York Times*, "We come to language through her, and to mystery and laughter and action. To poetry" (Rukeyser). In a 1905 issue of *The Dial*, Walter Taylor Field called Mother Goose the "starting-point from which mankind begins its knowledge of books," noting how every "novelist whose…name is in the mouths of the multitude, gained his first notion of fiction on his mother's knee from the somewhat highly colored story of the old woman who swept the cobwebs out of the sky" (Field 366). Despite this popular attention, surprisingly few scholastic monographs entirely devoted to the catchy, nostalgic texts works of Mother Goose exist, and a whimsical Google query for "Mother Goose scholars" primarily yields blogs of proud parents celebrating toddling readers developing their first area of literate expertise (granted, more strategic keywords will unearth more pertinent resources).

In their introduction to their 1960 compilation of Mother Goose stories and poems*, The Authentic Mother Goose: Fairy Tales and Nursery Rhymes,* Jacques Barchilon and Henry Pettit exclaim with almost uncritical enthusiasm, "No works that have endured anonymously are more worthy of critical appraisal than these. There is surely no need to substantiate the universality of such fairy tales as "'Sleeping Beauty'...or of such rhymes as 'Ride a cock horse,' 'Hickory, dickory, dock'" (8). The editors trace how these folk tales and poems were developed and

circulated through an intercultural "interplay of printed and oral texts" which lent the Mother Goose tales "extraordinary vitality" and dynamic variations (9). Then, they delve into the biography—or lack thereof—of Mother Goose herself, with an adamant and definitive declaration of, "Mother Goose never existed," before bluntly debunking the stickiest myths (9).

The mixed roots and anonymous nature of the works attributed to Mother Goose render her affiliations and identity a topic of great curiosity and ongoing mystery to those readers through the ages who have attended more analytically to her oeuvre. Some of these writers, such as Field, who also believes "we must consign [Mother Goose] to the realm of myths; for she appears to be even less substantial than Homer," also comment on how little this mythical figure's primary target audience are likely to care about these findings (367). After all, Field writes, "To try to make her sensible is to destroy a chief element of her charm," and in her works, it is a "quaint flavor of things half understood and wholly unusual, which appeals to every child" (370). He offers this charming example:

> No child knows exactly what it was that Little Miss Muffet sat on, and it is an interesting experiment to get from a dozen average children their ideas on this subject...the artists who illustrate 'Mother Goose' are as far apart in their views as the children (370).

While depictions of Mother Goose herself and the contents of her tales and rhymes continue to range widely today, researchers now generally agree that Mother Goose, or *ma mère l'Oye* in the original French, most likely refers to the older female figures once assigned to geese-keeping tasks on French farms. Minding geese was supposedly easy enough for these women to be tasked with a supplemental role as a "stock teller of tales" responsible for entertaining children (10). Seventeenth century dictionaries, such as the *Dictionary of the French Academy* (1694), count "*contes de ma mère l'Oye*" and "*contes de la mère l'Oye*" among the synonyms of popular expressions translating roughly to "old wives' tales" ("*contes bleus*" and "*contes de vielles*"), and

even referring more broadly to bedtime stories and fairy tales (Bottigheimer 108).

This means many "things that were fabulous or fictitious were thought of as '*contes de ma mère l'Oye*' by the French," Barchilon and Pettit suggest, "with a clear overtone of witty disparagement" (Barchilon and Pettit 9). One of the earliest documented literary nods to Mother Goose can be found from Lettre V. of Jean Loret's "weekly versified gossip sheet," *La Muse Historique,* dated June 11, 1650 (Bottigheimer 107; Lang). In the introduction to his 1888 edition of *Perrault's Popular Tales,* Andrew Lang copies the rhyme:

> *Mais le cher motif de leur joye,*
> *Comme un conte de la Mère Oye,*
> *Se Trouvant fabuleux et faux,*
> *Ils doveiendront tous bien penauts.*

The first three lines of this clip can be found translated by Ruth B. Bottigheimer in *Fairy Tales Framed: Early Forewords, Afterwords, and Critical Words* as:

> But the dear sign of their joy
> Like a tale of Mother Goose
> Showed itself to be fictional and false…

Jeri Studebaker offers another translation in *Breaking the Mother Goose Code*: "Since the reason for their happiness is as fabulous and false as a Mother Goose tale, they will eventually be very disappointed" (xiv).

//

In *Mother Goose Refigured: A Critical Translation of Charles Perrault's Fairy Tales,* Christina Jones considers how the construction of Mother Goose as the "metaphor of a maternal goose and the weighty humanity of the figure...evoked aged female wisdom, matronly tasks, and peasant stories" (Jones 4). Gender and class play noteworthy albeit somewhat predictable roles, as the global popularization of the female farmer figure Mother Goose's tales is universally credited to wealthy male writer Charles Perrault (1628 – 1703), whose own biographies are full

of speculation. His first edition of *Histoires ou contes du temps passé* (*Stories or Fairy Tales from Past Times with Morals*) was initially penned in 1695—likely by goose quill, a material detail which will receive focused attention later on. The first print edition was released in France in 1697, and Mother Goose was introduced to English language readers arguably for the first time through Richard Samber's 1729 translation.

The subtitle for Perrault's work, *Les Contes de ma mère l'Oye*—translated across texts variably as "Mother Goose Tales," "Tales of Mother Goose," "Tales of My Mother Goose," and more—was embedded into the frontispiece and eventually surpassed the main title in popular usage. Each edition opens on a frontispiece rendering the composite figure of Mother Goose as a single human entity. In these illustrated prints, an old woman is seen "in suspended animation," spinning yarns both literally and figuratively by "holding a distaff" while addressing a troupe of aristocratic youth huddled around her before a hearth (Jones 4). Jones comments, too, on the allegorical nature of the woman reaching for her spinning yarn as "at once miming the act of spinning and demonstrating—her mouth open—its metaphorical association with storytelling," and thus offering "our first glimpse into the complex web of registers in which the volume works" (6). A plain square placard pinned on a backdrop door announces "*Contes de ma mère l'Oye,"* the crucial, unmissable detail translated within the image as "Mother Goose's Tales" in the English edition.

Perrault's dedication of his manuscript to the nineteen-year-old princess Élisabeth Charlotte d'Orléans adds another controversial and class-conscious dimension to the Mother Goose agenda. "Mademoiselle," Perrault writes in the curious opening line of his dedication letter, "No-one will find it odd that a child took pleasure in composing the tales in this collection, but you might wonder that he dared send them to you…" He reasons, "...who better to

understand how commoners live than those chosen by heaven to lead them?...Never did a fairy of past time give a young creature more gifts, and gifts more sublime, than you got from nature." (qtd. and translated in Bottigheimer 126). In addition to analyzing the strangeness of the dedication in more depth, Jones demonstrates how the "coupling of Mother Goose and Mademoiselle," the rural and the royal, "epitomizes a paradox in the style of the tales that scholarship has long attempted to reconcile" (12). She credits this as one of the reasons why the "collection exhibits a fundamental hybridity that can feel odd, sometimes dissonant, manifesting what linguists call 'code-switching' between different registers of language: learned and popular, serious and humorous, proper and bawdy" (12).

In addition to the hybridity of genre and audience evident in Perrault's project, this marking of "fundamental hybridity" connects again to the omnipresent sense of wonder at the sublime. Recall how wonder has historically been "associated with paradox, coincidence of opposites" (Bynum 7). Caroline Bynum writes in her classic essay on medieval wonder that "one finds *mira* (wondrous) again and again in the texts alongside *mixta* (mixed or composite things), a word that evokes the hybrids and monsters also found in the literature of entertainment" (7).

Ultimately, "fundamental hybridity" and this *mira/mixta* link are central concepts and conceits in tales of and about Mother(s) Goose, a figure chimerically composed of actual women who raised geese, symbols depicted in a fictional frontispiece, witches flying on ganders, geese in bonnets, and many other mythic and sometimes monstrous iterations and reiterations. In attempting to put chimeric composition into play throughout this dissertation project, I consider gossamer (like murmurations) to be a conceptual compositional aid, and strand together mythic materials and mixed methods while employing a blend of academic and non-academic approaches to compose in ways hopefully compelling to some combination of niche and broad

readers. We can rely on murmurations and gossamer alike to carry stories, again—to move what may appear superficial, seasonal, and symbolically unsubstantial and flimsy to a more powerful realm of dynamic, storied strength even while illuminating the gaps along the path.

//

A Wild (Mother) Goose Chase

"Whoever you are, no matter how lonely,
the world offers itself to your imagination,
calls to you like the wild geese, harsh and exciting—
over and over announcing your place in the family of things"
– Mary Oliver, "Wild Geese"

Gaggles of theories have been incubated in eclectic efforts to attach Mother Goose to real and legendary figures. Among them are several European women named Bertha, two Americans named Elizabeth, and one Mary Goose. In a minor but controversial 1930 work on *The Real Personages of Mother Goose*, [2] Katherine Elwes-Thomas posits a theory believing:

> The tales of *mère L'Oye* are taken from ancient legends of 'Goose-Footed Bertha,' wife of Robert II of France. Queen Bertha is represented in French legends as spinning, with children clustered about listening to her tales. From this arose the French custom of referring any incredible stories to 'the time when good Queen Bertha spun.' (28)

It turns out there are several notable women with a webbed foot depicted sculpturally on churches across France, and myriad tales suggesting various identities of "*La Reine Pied-d'oie*, or *Pedauque*," or "queen with the goose foot" (Planché 510). In *Fairy Tales,* James Robinson Planché writes, this "goose or bird-footed Queen" is a "soubriquet applied by some to a Bertha, Queen of France; and by others to St. Clotilde and the Queen of Saba"—the "first is an assertion without proof. The second a mere opinion," and the "third a tangible proposition" (510).

---

[2]The brief *Kirkus Reviews* entry on the reissue notes: "Odd that so scholarly a book should have no index."

I have found less consistent evidence across sources that Queen Bertha of Burgundy (964 – 1010) has been referred to as a goose-footed queen, but some legends do exist which render her a more literal contender for the title of "Mother Goose." Historians agree that King Robert II of France and Bertha of Burgundy were close relatives who married each other and were subsequently excommunicated by Pope Gregory V, punished on grounds of consanguinity. Here is where the historical record veers into legend, and details differ between inevitably secondhand accounts. In Planché's telling of the "dreadful story," Bertha was "brought to bed of a monster resembling an ill-formed duck, or...a goose," and afterwards, gave "birth to a goose, and…had herself become goose-footed, as a punishment for her marriage" (511). In another, Bertha's foot is not mentioned, and inbreeding with her cousin is cited instead for producing a child cursed with the head, and sometimes neck, of a goose (Prošić-Santovac 9).[3]

Today, "Goose-Footed Bertha" is found primarily as nickname *not* referring to Bertha of Burgundy or her goose-headed babe, but to an earlier Bertha, Bertrada of Laon (born between 710 and 727, and died in 783). This "Bertha Broadfoot" was the wife of Pepin the Short, and mother to Charlemagne. The origin of her nickname is unclear but may suggest she had prominent podiatric characteristics.

"Bertha" is also a common English name for an important Alpine pagan figure with several names. She is most often referred to as Frau Perchta and is historically depicted with a webbed foot (of goose or swan) and a spindle.[4] This Bertha, like gossamer, has a specific seasonal presence. Playing a role similar to Santa Claus for children today, Frau Perchta bore

---

[3]Controversial geneticist Eugene McCarthy, who is often accused of sensationalistic pseudoscientific claims yet occasionally praised for his *Handbook of Avian Hybrids of the World,* has an image-rich web feature on "Goose-Human Hybrids?" worth checking out: http://www.macroevolution.net/goose-human-hybrids.html.

[4]Other interchangeable names and affiliate spirits include Holle, Holda, Fru Gode, Fru Gosen, and more (Studebaker; Hahn 399; others). Variations on Perchta, Perchte, and Berchta are more common.

gifts to those deemed deserving during the twelve days of Christmas. However, she is significantly more sinister than the jolly Santa. In lieu of leaving coal lumps in stockings, Bertha eviscerates naughty children (and adults) and replaces their carved stomach cavities with straw or rubbish. As an "enforcer of communal taboos," the so-called "Perchta the Belly-Slitter" was not only "invoked in support of the work ethic, but also for the very Christian purpose of ensuring that days of rest and fasting were observed as the Church ordained…" (Smith 175). This meant she even hunted down victims in violation of seemingly minor infractions, such as "those who spun on holidays or who failed to partake sufficiently in collective feasting" (167). Smith quotes from a classic English rhyme which prophecies, "*He who eats goose on Michaelmas Day/ Will never lack money his debts to pay*" (qtd in Smith 175).

Jacob Grimm writes about Perchta and her counterparts at length in *Teutonic Mythology* (1835). These figures, it seems, are often depicted as protectors of animals and overseers of agriculture and spinning both — which aligns them uncannily with the Mother Goose figure. In addition, Grimm notes that Bertha did not originate as a dark, dangerous figure; her name's roots mean "the bright, luminous, glorious," and thus "by the very meaning of the word a benign and gladdening influence," despite how "she is now rarely represented as such" (Grimm 272). Mother Goose is affiliated, in turn, with both brightness and the dark. In a unique argument for the former, the flight of Mother Goose has also been tied to constellations by contemporary star lore historian Mary Stewart Adams[5]:

> Though typically regarded as a swan, the constellation Cygnus is also referred to as the Northern Cross, and as the Mother Goose, especially as rendered in the ditty: Old Mother

[5]To deepen this connection, Adams notes that Charles Perrault's brother Claude was the "architect that designed and built the Paris Observatory, so here we have two brothers working in the service of the Sun King, one devoted to story, the other to creating a structure for observing the stars." I have not found any other sources to articulate explicit astronomical connections between Mother Goose and Cygnus, so I reached out to Adams, who told me to "Stay tuned!" since she has a full-length book coming out soon on the subject.

Goose, when she wanted to wander, would fly through the air on a very fine gander.

A darker interpretation of the image of Mother Goose flying through the sky finds its origins in the history of witchcraft. In Ryoji Tsurumi's article on the Victorian development of Mother Goose, she notes that the image of the woman flying on her gander arose in the early nineteenth century, but "might have its prototype in the imagery of the witch flying on a broomstick...established since the fifteenth century" (Tsurumi 31). Jeri Studebaker further traces and dissects the range of 19th and early 20th century American artists who illustrate Mother Goose as a "Halloween witch," giving her a "large hooked nose, a giant pointed chin, and an evil, sinister grin smoldering on her face…" (Studebaker). She writes that despite appearances, Mother Goose and Holda (the sister deity of Perchta) are both "deeply connected to children," and the "bird-beak noses...might be a holdover from very ancient days when she [Holda/Perchta] was still a bird goddess." Furthermore, "both flew through the air on birds, or in wagons or sleighs pulled by birds," and after Rome's fall, "Holda merged with the goddess Aphrodite, who is shown by more than one ancient artist winging through the air on the back of a goose"[6] (Studebaker).

Arguably, all these Berthas, in brightness and in the dark—Bertha of Burgundy, goose-footed Bertha of Laon, spinning and goose-transfiguring Bertha of Alpine paganism—compose and inform the Mother Goose we know today. The biographies of these figures range from fragmented to fictional. The stories continue to conflate, combine, and recombine, and spin into new tales. Many are as unsubstantial as gossamer and require some suspension of belief to fully appreciate yet hold very real implications and impressions in connecting the pieces to reify the

---

[6]In her article, Studebaker calls Perchta and Holda sister deities; in her full-length book on Mother Goose, she claims they are interchangeable. I am still exploring this differentiation, and the Aphrodite connection.

project at hand. In addition to being an amalgam of anonymous French goose-keepers, Mother Goose as we know her today has also become a composite of collective understandings, beliefs behind these Berthas, and others, with her story thriving, messily, on fundamental hybridity.

//

A gravestone marks one Mary Goose in the Granary Burying Ground of Boston, MA, born in 1648, dead in 1690 at age forty-two, and the "Wife to Isaac Goose." Boston's tourists are sometimes introduced to this marker as the resting place of the real Mother Goose (some snarky writers suggest Duck Tours might be held accountable). To echo one reporter's nonchalant retort, "why let the facts stand in the way of a good story—or a good gravestone?" (Conradt).

While the French Mother Goose is seen as a storyteller, the American Mother Goose seems to be more of a poet. Both traditions feature some confusion regarding similar nomenclature. The European versions run abound with Berthas, while the American mythos features a mother and a daughter from Boston, MA, both named Elizabeth Goose (or Vergoose, or Vertigoose, in some versions). What we know for sure is that Mary Goose was the first wife of Isaac Goose, but it is his second wife, Elizabeth Foster Goose, who is the slightly more realistic contender for the Mother Goose title. Legend claims she is buried alongside Mary in the family plot, but her name went unmarked, causing confusion.

The *New York Times* published a short clip on "Mother Goose," in 1886 claiming, "Mother Goose's maiden name was Elizabeth Foster." Details offered included that Elizabeth Foster was born in 1635, married Isaac Goose in 1693 after the death of Mary Goose in 1690. He already had ten children, and Elizabeth had six more. The fluffy clip chirps,

> Think of it! Sixteen goslings to a single goose! Is it any wonder that she poured out her feelings in the celebrated lines: 'There was an old woman, who lived in a shoe,/She had so many children she didn't know what to do?'

The article goes on to say that once she survived Isaac by many years and eventually moved in with a daughter (not named here but called Elizabeth in other versions) on Pudding Lane. Grandmother Goose spent her days composing ditties to entertain her grandchildren, and her son-in-law Thomas Fleet, who happened to be a printer and publisher, “carefully wrote down what he could of her rhymes which fell from her lips,” and printed them as *Songs for the Nursery, or Mother Goose’s Melodies for Children* in 1719 (NY Times Historical).

While the humans in this story existed, as far as archivists can tell after thorough searches, it remains a “bibliographic mystery, whether the book was ever actually printed,” and *Mother Goose’s Melodies* is now considered one of those "elusive 'ghost' volumes in the history of American letters" (Smith, “Mother Goose's Mysterious Melodies”). *The Oxford Companion to Children's Literature* believes "American affection for Mother Goose seems to have given rise to a strange piece of invented history” (Hahn 400). Evidently, John Fleet Eliot, great-grandson of the publisher Thomas Fleet, pseudonymously authored the initial letter to the *Boston Transcript* claiming in 1860 that Mother Goose was “a Boston lady of a family named Goose or Vergoose” who moved to Boston from England in the mid-17th century (400). In his version, Mother Goose’s ditties were a “nuisance,” for which the only “remedy...was (supposedly) to collect and print the rhymes” (ibid).

There was a similarly titled book called *Mother Goose Melody,* however, issued by the Englishman and notable children’s literature publisher John Newbery, which *did* popularize Mother Goose’s poems for the English-speaking public. The earliest editions of this text have also been lost, but this one does exist. Dates given for its initial publication ranges in the 1750s and 1760s, but the oldest extant copies were printed in 1791 for Francis Power, “grandson of the late Mr. J. Newbery,” in London (citations from Indiana University’s digitized copy of the book).

The full title for the work was *Mother Goose's Melody, or, Sonnets For the Cradle*, and the title page notes that the book contains two parts. The first "contains the most celebrated songs and lullabies of the old British nurses, calculated to amuse children and to excite them to sleep," while the second includes works "of that sweet songster and nurse of wit and humour, Master William Shakespeare" (Powers and Newbery), in a casual juxtaposition which receives little elaboration. The first rhyme which appears in Newbery's *Melody* is on page vii in the Preface notably mentions both broomstick and cobwebs:

> There was an old woman toss'd in a blanket,
> Seventeen times as high as the moon;
> But where she was going no mortal could tell,
> For under her arm she carried a broom.
> Old woman, old woman, old woman, said I?
> Whither, ah whither, ah whither so high?
> *To sweep the cobwebs from the fly*
> *And I'll be with you and by and by*

The frequency in which the goose and the spider are invoked in close proximity across myriad Mother Goose rhymes are curious, especially as they almost always occur with no clarifying commentary.

\\

In the histories of Mother Goose I encountered, perhaps the least attention has been paid to the legacy of the woman who most embraced the persona of "Mother Goose" in a deliberate fashion. The Tractarian novelist Charlotte Mary Yonge (1823–1901) mentored two essay societies for aspiring female writers and edited two journals featuring their writing and art—the so-called Gosling Society, and the later Spider Society. The first began as a series of question-and-answer postal correspondences, in which Yonge issued questions and invited select female friends and family to write in responses. Yonge critiqued and edited their writing, which provided fodder for the development and "production of home-made volumes of a quarterly

illustrated magazine" called *The Barnacle,* named for the infamous myth that geese were birthed from barnacles (Coleridge 202). In her essay on Yonge's "Goosedom," Georgina O'Brien Hill believes that, "Just like these mythical barnacles, Yonge hoped that *The Barnacle* magazine might develop ambitious young women (goslings) into fully-fledged authors (geese)," and the illustrations often featured herself in "her guise as Mother Goose" (Hill).

Christabel Coleridge recollects the Gosling Society days fondly in her biography on Yonge, writing, "I think Charlotte was asked to be Minerva to a set of young owls," but that she intentionally chose to be

> Mother Goose to a brood of goslings, and for many a long year she gave us of her best—her eager interest in interesting knowledge, her careful guidance in good taste and good feeling, her love of innocent fun, and her hearty encouragement of every one's best faculties. Each girl had a name by which her papers were signed—Lady Bird, Gurgoyle, Chelsea China, Bog Oak, and many another… (Coleridge 201)

The Barnacle was circulated only as a private magazine between 1863 to 1869 among the Goslings, so despite writing under pseudonyms, the writers' identities were well known to one another through a mailing list. As a multi-genre journal, *The Barnacle* published a "mix of poetry, short stories, articles on what the Goslings were currently reading or places they had recently visited," in addition to a number of colorful illustrations and pasted photographs (Hill). Due to the small audience, the publication could address more controversial issues of the day, and thus provides "unique insight into issues that were considered largely unsuitable for Yonge's more conservative publication, specifically the ambition of women and the networks that supported their careers" (Hill).

Yonge's more conservative and public publication was *The Monthly Packet,* which she edited with great dedication for over forty years, from 1851 to 1899. *The Monthly Packet,* initially called *The Monthly Packet of Evening Readings for Younger Members of the English*

Church, served as a firmly religious and "supervised space in which to address contemporary issues," affiliated with the Oxford Movement (Walton 278). Yet, despite the serious purview and traditional mission of the magazine, it also published such eclectic serial selections as the Lewis Carroll short stories later compiled into *A Tangled Tale* (1885).

Under Yonge's tutelage, many of *The Barnacle*'s Goslings graduated to writing for the broader audience of *The Monthly Packet,* and her new Spiders essay club was organized from 1873 to 1886 to support this group of evolving authors. Even though Yonge remained "wedded to conservative principles throughout her editorship," she still "used the *Monthly Packet* to promote women's education both inside and outside the home" (281). In this time when "Education was often desultory, and High Schools had not been thought of," especially for women, Yonge herself questioned whether formal education might be appropriate for women, and her novels are often dismissed as anti-feminist today—yet she worked for years in staunch support of her Goslings' ambitions, "promoting and supporting girls as readers and writers" (Moruzi qtd in Hill). The Gosling Society, and later the Spider Society, ultimately launched successful writing careers for several of the members, including Christabel Coleridge.

\\

Despite all the evidence explicitly disproving the existence of one Mother Goose and corroborating the identities of composite Mother Geese, some contemporary web sources such as the Poetry Foundation website still insist, "the exact identity and origin of Mother Goose herself is still unknown." The lingering mysteries and insistent mimetic circulation around the Mother Goose tales align this cultural exploration with the mythic tales around murmurations in my first chapter. While the Mother Goose tales are in some ways more straightforward than those of, say, Berner and Schieffelin, they are no less mysterious in many others. The existing theories are all

likely as fictional as fairy tales, but Mother Goose mythos nevertheless echoes the slippery biographical fact/fiction interplay permeating my first chapter, entwined with the messy authorship debates around Juliana Berners and the creative interpretations of Eugene Schieffelin's intentions. I want to recall, too, the common anthropological invocation which threads this all together and is easily linked to the discourse of gossamer—that "man is an animal suspended in webs of significance he himself has spun," while naturally expanding "man" to encompass human animals of all genders (Geertz).

Avian (and other animal) elements and figures seem to insist on hovering with a particular intensity and urgency around fictionalized biographies. I do not think there is an easy answer to rationalize why this is, but I imagine it is somehow woven with the impossibility of experiencing and capturing fully embodied knowledge when and where humans encounter the nonhuman. This meeting point is a realm where inventions inevitably emerge, even when we pursue facts. While we might never understand another human's intentions or endeavors, we can often ask questions in shared languages, and make reasonably well-informed hypotheses based on analyzing artifacts and factors in the lives and cultures of our fellow humans. In human biographies written after the subject's death, and in cases where the subject cannot be interviewed, embellishments rise, and falsehoods follow. When writing about the lives of animals, there is almost certainly some level of factual remove in the storytelling no matter how scientific the enterprise. When writing about fictionalized figures, this departure from reality can be more fully embraced.

Recall the gossamer language of literary "webs" in Virginia Woolf's words in "A Room of One's Own" (1929), in which she uses a hybrid-fictional character and biography to make real, resonant points about the importance of deeply material things. On fiction, she writes:

> "fiction is like a spider's web, attached ever so lightly perhaps, but still attached to life at all four corners. Often the attachment is scarcely perceptible; Shakespeare's plays, for instance, seem to hang there complete by themselves. But when the web is pulled askew, hooked up at the edge, torn in the middle, one remembers that these webs are not spun in mid-air by incorporeal creatures, but are the work of suffering human beings, and are attached to grossly material things, like health and money and the houses we live in" (41).

The fact that Woolf herself crafts a fictional composite narrator to deliver her interrogation causes the reader to be hyper-conscious of the place of hybridity in treatments of reality and fiction. Woolf ties her apt web simile up by highlighting the combined corporeal realities of the handiwork taken to craft the web that is fiction, and the fact that nonfictional situations and fictional writings always engage in significant interplay. Though framed by fiction, the thoughts she showcases are grounded with reality. Active in her role as female and feminist writer, Woolf reminds readers again of the "grossly material things" needed for writers of all genders to function, and the imperfections that have potential to tug at any web. However, when "pulled askew," there is still elasticity and strength at the root of the silks – and this is true, as well, of minority writers in their efforts to succeed in the literary sphere. Woolf is an ideal storyteller to summon in discussion of biographies as a fiction writer who affixed "A Biography" to the titles of two of her texts, *Orlando* and *Flush*— the latter being, quite literally, an imaginative bestial biography of Elizabeth Barrett Browning's pet cocker spaniel.

Nigel Hamilton traces the trends of writing lives in the West in *Biography: A Brief History*, from saintly, didactic, and censored to messy reveal-all confessionals. He notes within how the genre continues to be "one of the embattled front lines in the struggle between society's notions of truth and imagination" (1). There are endless possible chimeric combinations of fictionalization in biographical works, ranging from hidden artful efforts to fill in gaps of knowledge on actual lives to flaunted and fabulistic fleshing out of fully-constructed characters. There are also plenty of other genres playing with hybridity in different arrangements and

frames, such as the *Roman à clef,* with their thinly-veiled or augmented nonfiction presented as fiction.

In a more relevant niche to this project are novels of circulation, also known as it-narratives or object narratives—the genre featuring first-person accounts voiced by anthropomorphic speaking objects, often told in satirical epistolary and/or autobiographical frames. These tales, which recall the origin and circulation of the narrating objects, reached peak popularity in the eighteenth century, and sometimes featured animal speakers. *The History of Pompey the Little: Or, The Life and Adventures of a Lap-dog* (1751) has been called "one of the most influential of the eighteenth-century it-narratives" in addition to "the first widely read modern dog narrative" (Brown 123). Evidently, by the nineteenth century, "Animal narrators...dominate[d] the it-narrative form" (Brown 123). Perhaps works such as Woolf's *Flush: A Biography* (1933) and Eileen Myles' *Afterglow: A Dog Memoir* (2017) could be read as experimental modern and contemporary descendants of this trend, even though the interchangeability of it-narratives and animal-narratives should be more heavily problematized as objects are not animals and vice versa. While I have not managed to track down any it- or animal-narratives starring geese, I have found at least two eighteenth-century accounts existing at close object-animal borders worth deliberating in this chapter: "The Genuine and Most Surprising Adventures of a Very Unfortunate Goose-Quill" (1734, 1751) and "The Adventures of a Pen" (1787, 1806). Both anonymously-authored works relay the harrowing journeys of goose quill pens. The latter quill even opens with a disclaimer on biography to set up his tale:

> As biography is a branch of science that has always claimed the regard of the sensible and discerning in the most enlightened ages, an account of its being both instructive and pleasing, I hope to be excused in laying before the public a series of adventures...on my own history, and relate the most material events that have befallen me, from the earliest part of my existence to this day.

Both quasi-autobiographies begin in a similar place of tranquility. The first feather speaks of "happy undisturbed hours, that I, under protection of my parent goose, enjoyed in the purling transparent rivulet…," and fondly describes moments when "my mother, in all the pomp and vanity of love, clapped her expanded wings, and looked on me her greatest ornament…" (3 "Genuine"). The latter says their first memory is "being, a long time since, situated on the wing of my parent, with four of my brethren, on a large common in Lincolnshire," where "we lived in great amity...being carefully placed by my mother's side continually, and invigorated by the warmth of her body, till we ripened into full growth and firmness, and were capable of assisting her in the various employments of her station" (353). Both quills are inexplicably gendered male despite being sourced from specifically female mother geese.

The first feather spent three years undisturbed until "I was plucked by the unrelenting hand of my cruel mistress," sent to London and sold to a stationer at the Strand, "who transformed me into a pen." From here, the pen passes from a "Man of Business" to a Dr. Waddle, to a "Lady of Quality, who was an Authoress, and being big with a Thought, called eagerly for a Pen…" (8). Both share similar experiences of being chewed upon: one is used by one master to "cleanse the corrupted filth from his rotten teeth" (25), and the other pen complained that his owner "would gripe me between his teeth till I was near perishing" (155). Despite the more descriptive title of the first account, it is "The Adventures of a Pen" which features many more excruciating details on the transformation process from feather to pen.

First, the quill describes the "dreadful catastrophe" of his mother being 'inhumanly stripped, while alive," and how he and his brethren were "violently torn from her bleeding sides, (without the lease regard to her moving cries and writhing anguish)," and sent in a basket to a "state of slavery," where "we were shut up in close durance, and deprived of air, light, and water,

for many days...huddled promiscuously together in a large hamper" until arriving in London (153). There, they shared an "experience of such horrid torture as could not have been exceeded by a Nero or Caligula," wherein a "tyrant" bound bunches of feathers up with cords, and threw them in a cauldron of "boiling liquor," and pressed "down into the liquor till it had penetrated every part of our frame," then "condemned to pass the night in a hot oven" (154). The depictions of torture in this sequence are especially dark and vivid, as they employ discourses reminiscent of mistreatments inflicted by oppressive parties on less powerful humans as well as on animals (especially farm animals) throughout history well into the modern day. Used to describe the treatment of objects, these words are meant to be humorous and hyperbolic, but they still instill a sense of unease.

The second quill's adventures continue when he is sent to a stationer and purchased by "a strange kind of being called an Author," who bought a bundle of quills and brought them to his garret, where the quills witnessed another horrible sight on his floor: "the scattered fragments of many of our species, cut, hacked, and torn into piece-meal" (155). A knife is taken to the quill, who is stripped and sharpened into a pen through "excoriating and mutilating operations," and upon being stuck in a vial of ink, he muses, "I was carefully preserved as his favourite servant," but "still far from being happy" (155). As the quills' lives continue, they take some joy and solace in the clandestine correspondence they are privy to, and highlight moments of strong emotion, where they are thrown in a fit of anger, or passed off to a new owner. It is notable that the makers and writers who have the tools for language are portrayed in these tales as powerful, but in harnessing their control and power by mastering the craft of both their writing implements and writing itself, thoughtlessly abusive.

The etymology of the word "pen" comes from the Latin word for "feather," or *penna,* and

quill pens were commonly used from the early 7th century, but production "peaked in the early nineteenth century, when education, literacy, and letter writing were on the rise but before steel nibs became widely available" (Hanson 236). There were several techniques for producing quill pens through the ages, and indeed all might seem cruel from the perspective of the goose, if not the feather itself. Making the writing quill involved stripping away the decorative plumes of the feather—these were only restored in visual culture because they were aesthetically appealing for later theatrical and film productions. There were methods involving boiling the feathers, and others involving dipping them in "hot sand or mild acid," and in all cases, the tip of the quills were cleaned and hardened (237).

Each goose could only yield five outer flight feathers per wing, called primaries, suitable for fine pens, and the goose herself was often slaughtered. Geese were popular domestic fowl for they offered "four distinct income streams," including "salable eggs, meat, and down," in addition to "the finest writing implements in the world" for over a thousand years (Hanson 234). In literature around and about quills, the discourse of slavery and servitude is often invoked — and quills and geese are still honored and respected in the same complicated breath. Thor Hanson writes in *Feathers: The Evolution of a Natural Miracle,* that "people often revered the pens that composed a famous work," and "odes to their goose feathers were not an infrequent topic for poets" in the nineteenth century. The poem he excerpts from Lord Byron is a prime example of this, as it reads:

> Oh! nature's noblest gift — my gray-goose quill!
> Slave of my thoughts, obedient to my will,
> Torn from thy parent-bird to form a pen,
> That mighty instrument of little men! (234).

The emphasis of the parent-bird makes this especially unsettling—again, the mother

goose of the quill is the one who is stripped. The father goose rarely makes an appearance.[7]

(‘>

Take a Gander, Silly Goose

//

“I should say Dangerous, but sure I am That Ganderous is a Dangerous Anagram.”
– John Taylor, “The Water Poet”(1630)

The word “goose” refers to waterfowls of the sub-family *Anserinae,* birds which belong to the larger family of *Anatidae,* whose relatives include (usually) smaller ducks and larger swans. In some sources, the term “goose” is given a female connotation, distinct from the male “gander.”

The etymology of “gander” is controversial. While it “has been conjectured that gander may have been originally the special name of some kind of water-bird,” it is also suggested that “its association with goose is accidental, perhaps arising from the alliterative phrase ‘goose and gander’” (*OED).* The term has also been attached to some controversial concepts, such as the obsolete “gander-moon” and “gander-month.” Demarcated as “mainly slang” in the *OED*, gander-month is a noun marking “the month after a wife's confinement,” as a possible “allusion to the gander's aimless wandering while the goose is sitting.”

In *Dictionary of the Vulgar Tongue* (1796 and 1811 editions), Francis Grose defines this as the “month in which a man's wife lies in: wherefore, during that time, husbands plead a sort of indulgence in matters of gallantry.” Variations of this meaning, most of which suggest this is a period when a man is permitted to indulge in extramarital relations due to his wife recovering from childbirth, can be found in definitions throughout the nineteenth century. Thankfully, the

---

[7]That being said, *Father Goose: His Book* (1899) was L. Frank Baum’s first bestseller, and E.B. White has an excellent essay on “The Geese” featuring father geese.

term seems to have faded into obsolescence since.

The still-common saying of "take a gander" may have narrowly overlapped on the usage timeline but appears to have a different origin. British etymologist Michael Quinion has traced "gander" back to 1887, in an entry on "Gonder" in *The Folk-Speech of South Cheshire*, a verb meaning "to stretch the neck like a gander, to stand at gaze." The following usage claims to come from "thieves' slang" in a 1903 *Cincinnati Enquirer,* calling "Gander, to stretch or rubber your neck" (qtd. in Quinion). Furthermore, he writes:

> No doubt to gander became the term because to goose had already been borrowed; this was taken from the way that the birds were known to put their beaks embarrassingly—and sometimes painfully—into one's more private places.

Indeed, there are six forms of "goose" as a verb in the *OED,* the fifth of which is "To poke, tickle, etc., (a person) in a sensitive part, esp. the genital or anal regions," as of the nineteenth century. Of the generic noun "goose," however:

> Without distinctive addition or context, the word is applied to the common tame goose (*Anser domesticus*), which is descended from the wild grey or greylag goose (*A. ferus* or *cinereus*). The other numerous species are distinguished by adjuncts expressing colour, appearance, or habits, as black goose, blue goose, blue-winged goose, laughing goose, pink-footed goose, white-fronted goose, etc.; habitat, as fen goose, marsh-goose, etc.; native region, as American (wild) goose, Chinese goose, etc. See also barnacle goose…

Following the barnacle goose, of course, results in recovering that odd and resilient myth both used to name Yonge's journal and named in Bynum's article as a quintessential object of wonder. Even the common names are linked, from the long-peduncled tidepool arthropod we know today as goose barnacles (*Lepas anserifera*) to the barnacle goose (*Branta leucopsis*). The *OED*'s etymological notes on the second definition of "barnacle," noun, gesture to how the "history of this word is involved in an extraordinary growth of popular mythology, traced back as far as the 11th or 12th centuries by Prof. Max Müller."

The original barnacle goose myth seems to be one of many strange beliefs about birds

which emerged before the reality of migration was realized and researched. The apparent lack of goose nests in Europe during certain times of year paired with the surprising appearance of the birds on shores and in water during warmer seasons led onlookers to surmise that barnacle geese hatched from barnacle stocks. After all, when both species were examined with a generous eye, they resembled each other in coloration and other features. Since barnacles were often found stuck on driftwood, some even suggested that there were barnacle trees, from which the barnacles grew and then hatched geese—meaning it might even be argued that these geese were aligned with the vegetable kingdom. English botanist John Gerard published the influential 1597 tome *Herball, or Generall Historie of Plantes,* with well over a thousand pages about botanic lifeforms, and one page featuring an exploration of barnacles and geese, where he writes:

> There are found in the North parts of Scotland and the Islands adjacent, called Orchades, certain trees whereon do grow certaine shells of a white colour tending to russet, wherein are contained living creatures: which shells in time of maturitie do open, and out of them grow those living things, which falling into the water do become fowles, which we call Barnakles…but the others that fall upon the land perish and come to nothing.

There were religious benefits to this history which perhaps reinforced its popularity. Roman Catholic leaders believed that being born from barnacles (and perhaps even from barnacle trees), the birds were at best shellfish and not fowl, which meant they could be consumed on days when meat was not permitted.

\\

"Say Boo to a Goose"

Given its long history of domestication and the still-ubiquitous presence of wild geese across the globe, the goose has unsurprisingly held symbolic significance in the religious realm in diverse ways. Saint Isadore, archbishop of Seville, called the "tools of the scribe" the reed-pen and the quill in the early seventh century. In this "first definite reference to the use of the quill,"

he wrote that the "tip of a quill is split into two," and the two tips stood for the Old and New Testament," and were tasked with "the weightiest task of the day, copying and illuminating scripture" (Hanson 236).

In *Flights of Fancy: Birds in Myth, Legend, and Superstition,* Peter Tate gives a broad gloss of the goose in world cultures and religions, beginning with how geese were sacred to the goddess Juno in Ancient Rome (and also saved Rome by honking when enemies approached), linked to the ancient Egyptian earth god Seb, and served as "a messenger between heaven and earth in ancient China—only to name a few. Classicist Edith Hall has discussed how geese have been "associated with heroines and she-gods: Penelope, Aphrodite, Athena, Kore/Persephone, Artemis/Hecate, Nemesis and later Isis" (Hall). Edward A. Armstrong described a fertility ceremony that "would seem to tie in with accounts of 'Berchta' or 'Bloody Berchta,' an earth mother who was preceded by a flying goose," with no mention of Mother Goose in his description, nor tying of Berchta to the Christmas season (Armstrong qtd. in Tate 50–1). Tate also discusses how geese are sacrificed for specific holidays, noting that the "western tradition of eating roast goose at Michaelmas (29 September) may well have its origins in the sacrificial offerings of pagan times" (51). He discusses the significance of the goose's merrythought, or wishbone, for St. Martin's Night (11 November), without commenting on the common connection of the merrythought to female genitalia (I could expand upon this substantially, not to mention the linkage of prostitution with Winchester geese/syphilis as being bitten by the Winchester goose).

He also does not mention how Celtic Christians have conflated and connected the holy ghost with the holy goose through the years. In a 1912 Harold Bayley volume on *The Lost Language of Symbolism,* "The word goose is evidently allied to goost, the ancient form of ghost,

i.e. spirit" (93). A 2016 entry on the Mercy Hill Church blog claims that the "Celtic phrase for the Holy Spirit translates to 'wild goose' because they viewed God was not someone who could be tamed or domesticated by man" (Ryan). A 2017 offering from the Catholic website *Alateia* breaks down "How the wild goose became a symbol of vigilance and the Holy Spirit," by saying "the ancient Celtic people saw the Holy Spirit not as a hovering white dove but as a 'wild goose.'" The author Philip Kosloski further explains the symbolism, saying "this peculiar choice is because they saw how the Holy Spirit has a tendency to disrupt and surprise, and [move] in our lives in an unexpected fashion, similar to the actions of a wild goose" (Kosloski).

In *The Gaelic Etymology of the Languages of Western Europe*, the entry on goose is linked not to ghost but to the definition of a "silly person; one ignorant, uninformed or stupid," which continues by saying, "This word, generally supposed to be derived from the character of the well-known bird of Michaelmas—which however is not stupid, but far more intelligent than many other inhabitants of the poultry-yard" (Mackay 204). The term is linked to the Gaelic term *Gas,* for youth, and related terms of "a youth, boy, a servant; one ignorant from lack of experience." Harold Bayley wrote, "The original sanctity of the goose may account for our expression, 'silly goose,' the word silly being of pious derivation, and meaning originally blessed, happy, innocent, and gentle." (Bayley 96).

The idiomatic figures and everyday phrases around geese are plentiful, and the ones mentioned are simply skimming the surface. Across the idioms, the goose is figured in a variety of ways; "To cook one's goose" is slang for "to circumvent or ruin any one, to mar his prospects, to injure or destroy him," for example, while "say boo to a goose" means to display courage (Mackay 204), to name a few more.

The wild goose chase is especially interesting, following murmurations, in my dissertation's trajectory—as it is also derived from a literal following of animals implicating multiple species. In the *OED,* "wild goose chase, *n.*" is defined first as an obsolete term evidently used referring to "A kind of horse-race or sport in which the second or any succeeding horse had to follow accurately the course of the leader (at a definite interval), like a flight of wild geese." The second figurative meaning is predictable, but warrants repeating:

> An erratic course taken or led by one person (or thing) and followed (or that may be followed) by another (or taken by a person in following his own inclinations or impulses); in later use (the origin being forgotten) apprehended as 'a pursuit of something as unlikely to be caught as the wild goose' (Johnson); a foolish, fruitless, or hopeless quest.

Even more predictably, the earliest example cited is from Shakespeare's *Romeo and Juliet* (c. 1597), "Nay if thy wits runne the wildgoose chase, I have done: for I am sure thou hast more of the goose in one of thy wits, than I have in all my five."

The goose chase is thus a horse race modeled on the flight of skeins, another venereal term Shakespeare is given early credit for using in a figurative manner, this time in *Troilus and Cressida* (1609), where Thersites calls Patroclus "Thou idle immaterial skeine of sleive silke." "Skein" is another gossamer-affiliated term which weaves an etymological web calling to mind both geese in flight and spinning spiders, and to humans mimicking these actions, at once. The skein, too, has the sense of a story—yarns, threads, tales, tails. The first definition of "skein" denotes a "quantity of thread or yarn, wound to a certain length upon a reel, and usually put up in a kind of loose knot." The first uses of the word date to the 15th century, and the etymology dates a few centuries prior, to the Old French *escaigne* ("1354...of obscure origin"). The term is similar to the medieval Latin *scagna* (1294 in Du Cange). Definition 1b delineates a figurative connotation, as in "ravelled, tangled," while the second transferred sense is the "small cluster or

arrangement resembling a skein," such as the "flight of wild fowl" (*OED*). Recall that skein is a group of airborne geese in no particular formation, as contrasted to the "wedge," the V-shaped formation, as discussed in the first chapter, and the land-bound and female-gendered "gaggle."

A final obscure definition of "gossamer" found in the electronic *Middle English Dictionary (MED)* under the alternative spellings of "gossomer," "gosesomer," and "gossummer" is "something light, trivial or worthless," and finally, "a trivial wound." In a link to this final medical connotation, there is a wealth of literature on the use of both cobwebs and goose quills in historical and country medicine, as gauze and droppers, and even for the world's earliest blood transfusions, and a "goose-quill pedant" has been used in historical literature to describe a quack doctor (and quackery might be a natural next project following this).

<')

"Here, take the goose, and keep you warm"
– Alfred Lord Tennyson

Migrating from obscure terms and archaic practices to the omnipresent geese of the present day, bestselling author and internet celebrity John Green selected the common Canada goose (*Branta canadensis*) as the first subject of his educational comedy podcast, "The Anthropocene Reviewed." Giving the species a three-star rating for their "penchant for attacking humans" while likening their disruptive honk to a "dying balloon," he claims the "Canada Goose is hard to love, but then again, so are most of us." Green offers clever yet ever-familiar commentary likening geese to humans. Citing matters of love and death, he quips that Canada geese "usually mate for life, although sometimes unhappily" and due to their size, "they have few natural predators" so when "they die by violence, it is almost always human violence, just like us" (Green 3:29 to 3:31 and 3:45 to 3:51).

These geese were indeed hunted so indiscriminately they were believed to be nearly extinct in the early twentieth century—but given legal protections, the geese have since thrived. There is now a growing population of some four to five million Canada Geese in the United States alone (divided into seven subspecies), and again, plenty of attempts to manage their populations given their preference for living in human cities. In language reminiscent of the many writers who discuss starlings and their murmurations, Green continues, "Many of us have come to resent geese as a pest animal,' but "there's still something awe-inspiring about watching them fly overhead in perfect formation," as "even if they've become mundane…geese still feel wild to me" (Green 4:10 to 4:27).

In line with the fixation on murmurations and other flight patterns of birds, many prophets and scientists alike have been drawn inspiration and knowledge from studying the "planar, diagonal line formations," or the V-wedges, of migrating geese, most often of the Canada geese (Badgerow 749). Earlier researchers, in line with the oft-ocularcentric tendencies of earlier scholarship, suggested the stark visual contrast of the wedge functioned as a "form of visual communication," as "the geese that composed both diagonal lines, each slightly angled from one another, would have an unobstructed view of the lead goose who determined the flight path of the flock" (MacDonald). The 1988 "An Analysis of Function in the Formation Flight of Canada Geese" study published by John P. Badgerow in *The Auk* definitively contested this, and suggested the formation is not used primarily for visibility but for aerodynamic efficiency. Through his calculations, he realized that geese and other birds with larger wingspans are able to beat their wings more slowly and save energy by flying in geometric formations, and "effectively function[ing] like airplanes" (MacDonald and Badgerow).

I recently revisited the National Air and Space Museum in Washington DC to examine how the exhibits portrayed the influence of avian anatomy on human aviation. While admiring the planes suspended across the sunny, open concourse from the second floor, an odd aircraft with long wings and a small translucent body just big enough for a single human pilot to pedal by foot caught my eye. It turns out the name of this vehicle is the "Gossamer Condor," and it was a manpowered aircraft built in 1977 mainly out of "thin aluminum tubes covered with mylar plastic and braced with stainless steel wires," designed by Dr. Paul B. MacCready ("MacCready 'Gossamer Condor'"). This aircraft's simple and malleable materials, which included corrugated cardboard and styrene foam, made it comparatively easy to revise and repair. The Gossamer Condor was the first of its kind capable of sustained flight, as documented in archival footage found at the San Diego Air and Space Museum.

It is evident that forms, fragments, and imaginative figments from geese and their flighted affiliates are preserved in diverse areas of human activity and expertise—particularly in arenas that demanded the act of following a leader. In ancient China, there was a tactical formation for "rapid-release archer assault" evidently called the "Goose File Formation" (Sun-Bin qtd. in Graff 114). There is controversy about whether this figure advanced in a V-shape or a reverse-V wedge, but it is nevertheless said to have served "the purpose of maximizing the crossfire of the archers on both wings" (Graff 144).

In more modern military moves, the "goose step" has come to be known as the pejorative English name for the "stiff-legged parade march" style infamously embodied by the Nazi infantry in World War II (Quinion). When this style of German stepping initially emerged in the eighteenth century, it was dubbed *Stechschritt,* or "stabbing step," while the existing German

term *Gänsemarsch*, or "goose march," had "referred to people, particularly children, walking in single file, as goslings do" (Quinion). Etymologist Michael Quinion notes,

> This might have become known as the goose step because it made a soldier who was performing it look as silly as a goose…It's more likely that repeatedly standing on one leg reminded soldiers of the way a goose often stands.

I am nevertheless more inclined to agree with George Orwell, whose stance on goose-step is decidedly more serious. He wrote in "The Lion and the Unicorn: Socialism and the English Genius" (1941) during World War II:

> …goose-step…is one of the most horrible sights in the world, far more terrifying than a dive-bomber. It is simply an affirmation of naked power; contained in it, quite consciously and intentionally, is the vision of a boot crashing down on a face. Its ugliness is part of its essence, for what it is saying is 'Yes, I am ugly, and you daren't laugh at me.'… Beyond a certain point, military display is only possible in countries where the common people dare not laugh at the army. (Orwell qtd. in Scheffler).

The goose step continues to be used and refined by dictatorships today—the North Korean variation is evidently "pacy, disciplined, and really, really hard to do" (Hickman). Reporter Leo Hickman interviewed a fitness coach—the aptly-named Stuart Gander—to confirm this, and Gander expands on the extent to which the goose-step is "punishing to the body and very complicated" (Gander qtd. in Hickman).

The first use of the term "goose-step" in English actually emerged in the context of nineteenth-century military pedagogy, as the name of a drill military recruits were required to learn—they "were taught to stand alternately on one leg and swing the other back and forwards, keeping the knee straight," as the "first [step] that must be taken by a recruit entering on a military career" (Quinion). Quinion offers this Punch cartoon with its original caption, but not without remarking on how the recruits' bent legs do not actually match the written descriptions on the straight-legged nature of the step.

There appears to be as much a fixation on the flight as the feet of these fowl. Tales featuring human-geese relationships have been plentiful for centuries and span to the contemporary moment in endlessly fascinating variations—and in all of this, I cannot help but notice an odd prominence of poetic treatment around the feet and legs of birds. In some cases, such as with the birds of paradise, the birds were romanticized as not having or needing feet at all—and portrayed as perpetually hovering near the heavens—a legend reflected in their Latin name of *Paradisea apoda*. The etymology of "pedigree" is often tied to the French *pied de grue,* referring to the crane's foot—and credited to the crane's penchant for "standing on one leg, a position resembling the heraldic genealogical tree" (Liberman). As humans age, we cringe and worry about "crow's feet" wrinkling around our eyes; we dismiss messy handwriting as "chicken scratch." In human medical terminology, the Pes Anserinus ("goose foot") refers to the conjoined tendons of three leg muscles, believed to have received this name because "imaginative, ancient anatomists envisioned that the three muscles that come together on the medial surface of the knee looked like the three-toed foot of a goose" (Dyche). Bird bodies and human bodies are inextricably enmeshed in our language and our lives.

The first essay I published in my graduate career explored the uniquely human inclination to *replace* the feet of fowl—I explored tales of inventors outfitting beloved invalid poultry with lower-limb prostheses to improve their lives. A feature of this piece, on "Forms & Feet of Fowl: Twisted Histories of Poultry & Prostheses," is a one-footed goose named Andy. He captured the hearts of people of all ages and abilities in his small town after his inventive owner outfitted him with a Nike sneaker and empowered the goose to walk in local parades.

Geese, like many other fowl, are flock animals born to follow each other whether in flight or on foot. They are hatched with an imprinting instinct so intensive that newborn geese "will

follow any large moving object, including a human being, or, as experiments have shown, even a box dragged along by a length of string," and bond to it—and given this tendency, it is easy to imagine geese simply "may have domesticated themselves" (Armstrong 129). As a footnote, geese were first domesticated in ancient times, with Egyptian archaeological evidence dating back four-thousand years ago—long enough ago that specifics may never be clear.

Following geese in return, in some sense, seems only natural—there is no part of human life that has not been infiltrated by goose-language. Given that geese are cited as a common phobia, perhaps this idea will bring chills to some readers—and to impress upon this, consider how often frisson erects goose-flesh, the "rough, pimply condition of the skin, resembling that of a plucked goose, produced by cold, fear, etc." (*OED*). This physiological phenomenon has many names—medically, cutis anserina, horripilation, piloerection; colloquially, goosebumps, goose pimples, goose-flesh. Hyphenated and non-hyphenated variations occur across languages. As geese are only one of many birds whose skin will pucker on plucking, some languages substitute geese with chickens, ducks, and birds more generally. There exists research on the evolution and purpose of piloerection, suggesting its use for insulation and intimidation—erect hairs, especially on long-haired animals, can render a creature larger than it is. More recent human research on goose-flesh has attempted to explore areas of affect and agency—asking why various strong emotions are linked to these skin reactions, and why some people can voluntarily summon goosebumps—resonant again are those familiar themes of mastery and control.

Echoing my approach in the first chapter, I want to end this section not by concluding but by leaving a poem as a place to pause, as a turning point and a place of return. The poem is "The Geese" by Jorie Graham, published in a spring 1979 of *The Iowa Review*. In the Poetry Foundation profile on Graham, critic Calvin Bedient writes that Graham is "never less than in

dialogue with everything," and by questioning everything, what "counts is the hope in the questioning itself, not the answers" (Bedient qtd. in "Jorie Graham"). Even if Bedient's words do not refer specifically to this piece of Graham's, they feel appropriate, perhaps even kairotic, to appropriate (as verb) in the moment of closing this leg. In crafting and curating this section, I have tried intentionally to practice the gossamer work of weaving skeins, of continuing to connect and illuminate the interconnectedness of our natural and cultural world, and to reinforce reminders to remain in dialogue with every infinitely-constellated element possible. This is a work invested in pulling together, not taking apart, and about lingering in the spaces between what we limn as pestilence and what we value as poetic, where this comes from, and why.

('>

The Geese

by Jorie Graham

Today as I hang out the wash I see them again, a code
as urgent as elegant,
tapering with goals.
For days they have been crossing. We live beneath these geese

as if beneath the passage of time, or a most perfect heading.
Sometimes I fear their relevance.
Closest at hand,
between the lines,

the spiders imitate the paths the geese won't stray from,
imitate them endlessly to no avail:
things will not remain connected,
will not heal,

and the world thickens with texture instead of history,
texture instead of place.
Yet the small fear of the spiders
binds and binds

the pins to the lines, the lines to the eaves, to the pincushion bush,

as if, at any time, things could fall further apart
and nothing could help them
recover their meaning. And if these spiders had their way,

chainlink over the visible world,
would we be in or out? I turn to go back in.
There is a feeling the body gives the mind
of having missed something, a bedrock poverty, like falling

without the sense that you are passing through one world,
that you could reach another
anytime. Instead the real
is crossing you,

your body an arrival
you know is false but can't outrun. And somewhere in between
these geese forever entering and
these spiders turning back,

this astonishing delay, the everyday, takes place.

Archival Acknowledgements

I want to reiterate thanks to Clare Withers in Hillman Special Collections, whose enthusiasm for and expertise in children's literature were invaluable in directing me toward materials on Mother Goose and quills-related texts. Thanks, too, to James Fishwick, who welcomed me to the Lady Margaret Hall Library at Oxford University, and who responded to my initial queries about a few specific details of Charlotte Yonge's *Barnacle* by going above and beyond to photograph the covers and relevant images of every *Barnacle* issue for me. I am grateful I eventually made the trip to see the whole collection—it's a treasure trove of an archive I touch on only too briefly here, but plan to write about in greater depth in future projects.

4.0 Homing Worlds

Figure 3: Pigeon(hole)s at the home of Dave Corry
October 2017, personal photograph

\+ + +

Don't shove me into your damn pigeonhole, where I don't fit, because I'm all over. My tentacles are coming out of the pigeonhole in all directions."
– Ursula K. Le Guin

+

Opening

Murmurations and gossamer are concepts which by definition escape containment and, when embodied, inhabit the world as immense, amorphous, and viscous networks, [in]formed by natural forces. The orienting object of the third chapter departs sharply from these preceding models—in stark contrast, the pigeonhole is a rigid and literal container with walls erected from wood or carved from caves by the handheld tools of humans. One venereal term uniquely applied to a school, loft, flock, flight, or dropping of pigeons is a "kit" of pigeons (*OED*). This is apt as the most common definition of "kit" is a "set or outfit of tools," and pigeons served for centuries as a toolkit for human survival—we trained them to deliver our messages, consumed their bodies as meat and medicine, collected their dung for fertilizer and leather-work, and more. While murmurations have long moved us to invent and innovate, and geese have provided us with quills for scribbling skeins, we have long exploited pigeons as our all-purpose tools.

The earliest pigeon remains were excavated from 12,000-year-old midden heaps left by Mediterranean cave-dwellers, subfossils which suggest these birds were either consumed by humans or had "nested in caves used by humans" (Johnston 561). Pigeons and humans have likely shared land for even longer, perhaps 30,000 years; our intertwined histories extend far back enough through time for the science to be uncertain.

Pigeons were likely the first birds we domesticated—at least 5,000 years ago—and evidence of pigeon domestication can be found in Egyptian hieroglyphics, Mesopotamian cuneiform tablets, and other forms of ancient writing (Blechman 11). These are the birds whose bodies our ancestors attached epistles to for daily deliveries, and whose flights were the fastest

(albeit initially unidirectional[8]) method of message-transmission from ancient times until Samuel Morse developed his code in the 1830s and 40s. The symbiotic, synanthropic[9] partnership between people and pigeons has been among the most productive and influential in world history, so it makes sense that pigeons have long been featured in and have fostered an enormous range of human communications. What does not make sense, as with all the birds featured across this project, is the common attitude of disgust and pest-labeling these birds have fallen victim to in the recent past. The popularity of pigeons has plummeted so much that in the more recent centuries, texts centered on pigeons tend open with disclamatory remarks justifying or rationalizing their choice of subject—a sort of pigeon *apologia*.

John Moore's dedication from *Columbarium: Or the Pigeonhouse* (1735) precisely sums up and exemplifies the sort of indignant disclaimer standard to pigeon books:

> Many subjects the naturalists seem to have exhausted. Horses and dogs, and most of the animals that serve for the conveniences or amusements of life, have undergone the nicest enquiries; *while the pigeon, that contributes in some measure to both, a domestic as it were of ours, has been totally neglected.* With a partiality usually shown to the victor, the hawk has engaged the pen of many a writer: But his prey, that seems to fly to us for protection, has scarce met with that..." (Moore 1-3, emphasis added).

E.O. Dixon maintained in 1851: "And yet, at the present day, a love for Pigeons is considered rather low" (2). In the next century, in 1920, Arthur Cooke begins: "For one apology at least the author of *A Book of Dovecotes* has no need; he is not called upon to find excuses for producing 'yet another volume' on the subject chosen for his pen" (vii). In contemporary texts again, Barbara Allen introduces *Pigeon* (2009) with a quote borrowed from the foreword of Carl Naether's *The Book of the Pigeon and of Wild Foreign Doves,* which cites yet another pigeon

---

[8] By nature, pigeons home in one direction, but can be trained strategically to travel between two points.

[9] Though the term can be used to describe neutral, non-domestic human-animal relationships, it is found most often in discourse surrounding pests. Colin Jerolmack (*The Global Pigeon)* and others discuss this.

fancier warning:

> Don't you know that no pigeon book has ever become a best seller?...Most of your effort and time will be thrown away. I have never seen a pigeon book that paid for its printing and effort…I have seen many start pigeon books but precious few finish them (7).

Still, there have been a surprising number of pigeon books published for academic and public consumption in the past few decades; perhaps a more impressive record than starlings and geese combined. Just last year, in 2018, a gorgeous photographic compilation by Andrew Garn called *The New York Pigeon: Behind the Feathers* was published with text by Emily S. Rueb and Rita McMahon. Sociologist Colin Jerolmack connects with pigeon lovers in his multi-sited ethnography, *The Global Pigeon* (2013), an engaging and tightly woven exploration of the relationship between people and pigeons across several continents. Jerolmack is one of at least two social scientists who penned admirable academic books on pigeons in recent years. Anthropologist Hoon Song's intense *Pigeon Trouble: Bestiary Biopolitics in a Deindustrialized America* (2010) tackles two subjects he admits he is personally terrified of—birds and stereotypes of rural whiteness—by confronting them head-on through studying an annual pigeon shoot in rural Pennsylvania.

Nonfiction writers Andrew Blechman and Courtney Humphries completed cultural histories of pigeons in 2006 and 2008, respectively, and the more journalistic works all share rather similar approaches. Each author opens with introductions of how they had never paid attention to pigeons until some noteworthy encounter, which they detail with some disgust—often an encounter with pigeon defecation. Then, each shares milestones in the history of human-pigeon interaction, grapples with pigeon prejudice, and concludes with new avian appreciation. The repetition is predictable, perhaps inevitable, and even inescapable, as I have found in attempting to craft my own pigeon narratives. This is part of why pigeons were pushed to my

third chapter, when the first draft of my prospectus proposed a dissertation exclusively focused on pigeons (admittedly, also a bit apologetically).

More recently in 2016, Nathanael Johnson began the first chapter of *Unseen City: The Majesty of Pigeons, the Discreet Charm of Snails, & Other Wonders of the Urban Wilderness* with the bold, capitalized, and italicized, ***"DISGUST COMPELLED ME TO PIGEONS"*** (1).[10] He admitted that he "started thinking about pigeons only once I had been shat upon," before realizing how this "is a common initiation (a baptism of sorts) into pigeon research" (ibid). This checks out—and the commonality of such an occurrence has inspired numerous artful spins. One notable project is a biohacking conceptual art collaboration called "Pigeon D'Or," in which the duo Revital Cohen and Tuur Van Balen proposed as "a series of interventions on different scales, in pursuit of making a pigeon defecate soap" (Cohen and Balen).

Another duo, Anne Geene and Arjan de Nooy, published a limited edition pseudoscientific art book called *Ornithology* in 2016 through the Dutch press, De Hef. The comedic collection is impressive in content and heft; in its 336 pages, the authors intentionally balance and blend rigorous artistic and historical research with faux-scientific framing to showcase an assemblage of bird appearances in cultural history and everyday life. Included within is a chapter on "Velocity," which is simply a series of photographed bird dropping splatters. The authors explain, "From the shape of the droppings, it can be deduced whether and how quickly the bird was in motion...a classification is shown for speed, increasing from 0–60 km/h, or from wood pigeon to mallard." (Geene and de Nooy qtd. in Voon). The many pages of images in *Ornithology* are accompanied by minimal text, and in another section, Geene and de

[10] To be fair, every chapter employs a bolded first line, so this may be a book design choice rather than an authorial choice, but nevertheless leaves a vivid impression.

Nooy claim that the earliest photograph of a living bird may be a wood pigeon silhouette in an 1840s shot of a dormant oak tree by William Henry Fox Talbot. I imagine it is as likely to be a wood pigeon as any other type of dove, but nevertheless; the sort of information presented within is difficult, if not impossible, to fact-check, but lends itself well to artistic speculation.

+ + +

Naming

Pigeons and doves are scientifically interchangeable names of birds belonging to the *Columbidae* family. The scientific name of this common pigeon or rock dove is *Columba livia*, which translates to "the dove or diver bird of leaden or blue-grey colour" (Hansell qtd. in Allen 20). Despite their being the same bird, there is a distinct and problematic difference in the current cultural perception and reputation of these birds. As Jean Hansell claims in *The Pigeon in History* (1998), "*Dove* is traditionally reserved for use in the aesthetic context of religion, literature and art," while "*pigeon* is for more mundane matters, such as sport, fancy breeds and culinary use" (Hansell 8). Indeed, even today, white doves are commonly invoked as symbols of peace, love, and spiritual purity, while the plump and darker rock doves, blue-grey pigeons with iridescent green and purple necks, are dubbed unclean pests and diseased "rats with wings."

As it turns out, the real difference between "dove" and pigeon" is merely etymological—while "dove" comes from Germanic roots and refers to the diving flight of the birds, "pigeon" comes from French and the Latin *pipio*, or "peeping" chick. Both words refer to both birds interchangeably, yet to further complicate the onomastic situation this bird has been subject to multiple "official" name changes in by the International Ornithologists' Union (IOU), whose goal is "to facilitate worldwide communication in ornithology and conservation based on up-to-date taxonomy of world birds and recommended English names that follow explicit guidelines for

spelling and construction" (Gill & Donser). Today, the widely recognized feral bird is listed as the "Rock Dove," since the name "Rock Pigeon" conflicts with that of the Australian *Petrophassa*. The name "Feral Pigeon" is also "available for worldwide introduced populations" (ibid).

Nevertheless, I will refer to the rock dove as “pigeon” throughout my project for consistency, practicality (to mirror the majority of my sources), and to further the cause of restoring a positive connotation to the term. After all, the frequent disparagement of the darker creature as a “trash animal” (referring again to Nagy and Johnson II’s collection) juxtaposed with the celebration and affection for the white bird marks a problematic pattern of culture that emerges across our treatment of natural entities in the world, and should be reversed.

\+ + +

Homing

For much of history, pigeons were revered; they were first and foremost championed for their natural homing instincts, a skill so bafflingly powerful and foolproof that to this day, scientists are still working to decipher precisely how it functions. Whether by magnetoreception or other sensory systems or ability to gauge landscapes, this avian navigational know-how is unparalleled. All rock pigeons have an innate sense of navigation, but domesticated homing pigeons have been bred over time to fine-tune their speed and ability to travel long distances. A competitive pigeon can fly about 60 miles per hour over an average distance of 600 miles, and capable of short sprints at speeds up to 100 miles per hour. They can be released over a thousand miles away from their owners’ home lofts and still return to their coop in good time. It makes sense, then, that the evocative discourse of “homing” has traveled to more figurative applications in the centuries since pigeon messaging has been phased out.

In an effort to restore a positive reputation to the pigeon name in a classroom setting, I often draw attention through language to the critical role pigeons have played in the history of human communication when I ask students to "home in" on a text. I remind them that pigeon posts were established in all of the major ancient empires and were our fastest means of communication for a long stretch of time. The language of "homing in" traveling to figurative contexts seems to have gained popular usage in the 19th century, and continues to be used despite the pigeon connection often going neglected. The etymological work I am doing with figurative terms around pigeons in my own avian research is something I have tried to encourage my students to do in a range of assignments, certainly not limited to birds.

To address more fully and explicitly the teaching of reading, rhetoric, and writing, instructors often guide our students in critical and creative ways of "homing in" on texts to make meaningful sense of writing. We navigate global and local concerns, from analyzing rhetorical modes across contexts to parsing stylistic forces down to punctuational choice. As writers, we devote intense scrutiny to word choice and we model this in our teaching, beginning with our syllabus. Here, I want to articulate the importance of specifically homing in on etymology—and word histories and stories more broadly—in rhetorical pedagogy. This has been one of the underlying thematic arguments across this entire dissertation, and the figure of "homing in" pairs especially well with a deep dive into this element.[11]

The noun "etymology" is defined in the *Oxford English Dictionary* as "the facts relating to the origin of a particular word or the historical development of its form and meaning." "Etymology" itself is a multi-rooted term drawing from French and Latin, but I'm ultimately less

[11]Pieces of this following section are remixed from a hybrid combination of my seminar research, pedagogy job talk, dissertation prospectus, teaching statement, and more. If the language seems familiar, this may be why.

interested in dissecting the "facts" of the formal linguistic roots than in the generative constellation of possibilities that may arise in illuminating word origin stories more holistically. This is perhaps to say I am curious about the life stories of words—the biographies of words.

Much of the work of English studies is built on words, and in my experience, the first day of composition classes tend to open with some definitional aspect, often a dissection of a specific concept in a course title or description. Students may be asked to articulate, say, how "rhetoric" is defined or what "composition" means. In a recent first-year composition assessment meeting, instructors were asked to define "reflection." In occasions such as this, it may be useful to call upon etymology to reflect on our current understandings of terms and practices. Many ongoing contentions across disciplines and contexts can revolve around definitional claims,[12] and returning to discuss the histories of definitions could allow thinkers to note historical points of departure—to make greater sense of how interpretive differences of the same words have led to different worlds of study. It is possible for etymology and word stories to inform a situation's politics, an organization's decisions, etc.

In the classroom, I tend to treat etymology rather loosely as a keyword to signify any number of endeavors linked to a fluidly narrative approach to discovering the origin stories and migrations of meaning of any number of individual or connected words, idioms, concepts, or phrases. Any number of assigned etymological explorations teach students to engage with any number of pressing issues in a contemporary moment through close investigation of linguistic elements, and as I have aimed to model across this dissertation project, word histories and stories can play an illuminating role. Regardless of what is being taught, it is essential to scaffold

[12]This last piece on "definitional claims" is a paraphrased expansion from a helpful comment made by Adam Banks in response to the pedagogy job talk iteration of this section mentioned in the preceding footnote.

etymological assignments with texts. There are many readings that deal explicitly with defining, ranging from cultural studies staples such as Raymond Williams' *Keywords* to field-specific suggestions, such as *Naming What We Know* by Linda Adler-Kassner and Elizabeth Wardle. There are also many, many poets who draw from etymology.

Throughout English courses, when we ask students to consider close readings, we often begin by inviting them to identify elements that stick out—and repeated discourses, motifs, or symbols may emerge. We can invite etymological inquiry starting from here. Regardless of what they are reading for class, there are key ideas they can select for inquiry. It can be a productive exercise to explicitly ask the students to look up a term (even if they are already familiar with it, or think they are), and look up the word's histories, different meanings, variants, related terms and usages, etc. The story the word itself tells may or may not be intentionally connected to what they're reading. This invites an expansive way of making meaning that is anchored in research and inquiry. It can also lead to connections, mysteries, and narrative inventions—and fun discussions on subjects such as folk etymologies, backronyms (e.g. "SPAM" claiming to stand for "something posing as meat"), and mountweazels (or fictional and often humorous entries in reference books used as copyright traps). Light-hearted anecdotes on the manufacturing of facts can lead to more serious conversations on those topics I frequently circle back to on the messiness of the rhetoric around fake news and alternative facts in the political realm today.

From improving close reading practices to grappling with political truths, homing in on etymology may support instructors in achieving a range of other objectives. This sort of work teaches inquiry-driven learning and evidence-based research by asking students to identify and engage with reliable references, including primary and secondary, archival and contemporary sources. It invites students to seek connections and patterns in texts, and come to recognize and

appreciate the genre of definitions as they learn to do the work of defining. In having an opportunity to analyze and appreciate narratives rooted in language, they are also allowed to attend to the nuances of meaning and how meaning travels, and share their own word-based stories and explorations. Furthermore, this focus on language can draw attention to the importance of multicultural and multilingual awareness. Etymology in any language necessarily draws from a range of different languages, so understanding the power dynamics, aesthetics, and more behind the ways in which diverse languages hybridize also comes into play.

In English studies texts, it is a common rhetorical move to invoke and integrate the etymology of any central term in an article, and introduce or hinge some aspect of an argument on that etymology. I am reminded of an article by Jenny Rice where in a definitional discussion of "rhetorical situation," she "tracks the Latin roots of 'situation'…to the key words *situare* and *situs*," which share definitions linked to "location, site, and place…," to locate "a connection between certain models of rhetorical situation and a sense of place" (Rice 2005, "Unframing Models of Public Distribution: From Rhetorical Situation to Rhetorical Ecologies"). Indeed, there are internal and external dimensions of a word, further complicated by context, function, form, and more. Words have histories and stories—etymologies and/or folk etymologies—uses and misuses.

As instructors, we can bring attention to etymology from the first day of the course, by introducing stories around a key term or concept on which our course is hinged. Etymology can be an overt theme or an undercurrent articulated on the syllabus. Or, it can appear simply in standalone assignments that may inform critical research and thinking across the term. In my own teaching introductions, I often reiterate that I aim to immerse my students in a fully embodied compositional crafting with the simple but central tenet that writing must appeal to all

the senses to be deeply felt. The etymology of "text" is linked to "texture," after all, to the haptic contours of woven cloth, and “sentence” from sentire, “to feel” and “to be of the opinion,” not to mention the avian quill origin of “pen.”

When I taught my first ESOL conversation class in South Korea, my students and I once spent a class session sharing with each other how we transcribe the onomatopoeic sounds of animals in our respective native languages.[13] It was a playful yet surprisingly enlightening conversation, and one which lends itself here as a ready segue to a more serious area concerning multilingual learning: pidgin languages. The name “pidgin” in this context is likely derived from a Chinese mispronunciation of the word “business” in the 19th century. Pidgin languages are hybrid languages that emerge when cultures intersect and diverse peoples interface consistently across the globe, often for business dealings—and thus in addition to goods, end up trading and then blending pieces of each language to create a new, unique, and utilitarian entity. Like avian pigeons, human pidgins are often marginalized and mocked, and deeply underrated as meaningful modes of communication, until close inspection, when they are often found to be functional, practical, and rather sublime.

\+ + +

Pigeonholing

Pigeonholes were originally structures in dovecotes and columbaria designed to raise and breed pigeons for meat, dung, and more, before migrating to name cubby mailboxes and the nooks in Victorian writing desks. The first large-scale pigeon post network is believed to have been established across the Achaemenid Persian empire by Cyrus the Great in the sixth century

[13]It is perhaps worth noting here that there exists an entire genre of what critic Max Müller dubbed “bow-wow theories” arguing controversially that onomatopoeic animal sounds may have led to humankind’s earliest words.

BCE (Allen 102). In Ancient Greece, Aristotle included in-depth observations of pigeons in *A History of Animals,* and it was pigeon carriers who announced the victories of early Olympic games. Ancient Roman writers offered some of the first cultural insights into both agricultural practices and affective attitudes toward pigeon-keeping. Pliny the Elder described how "many are mad with the love of these birds; they build towers for them on the tops of their roof, and will relate the high breeding and ancestry of each, after the ancient fashion" (Pliny qtd. in Dixon 18).

The Romans designed what were called *columbaria*, or pigeon-houses or dovecotes, full of pigeonholes in which to breed and raise the birds, and collect their droppings for fertilizer and leather softening. Due to an uncanny similarity of appearance, “columbarium” also came to refer to their “subterranean sepulchre[s]” with “niches or holes for cinerary urns” (*OED*), or the extensive systems of “underground chamber[s], which Romans used for preserving the ashes of the dead” (L'hoir). The bodies of living birds and dead ancestors were housed in similar structures then, and today, the “columbarium” has been carried over as the name to our modern mausoleums for collective cremated interment.

The noun entry on “pigeonhole” has been revised several times in the *Oxford English Dictionary,* most recently in March 2006. The first definition of “pigeonhole,” noun, is “A small recess or compartment (usually one of a series) for a domestic pigeon to roost or nest in, usually constructed in the outer wall of a building or inside a dovecote or pigeon loft.” The second definition, in plural form, is a historical colloquialism connoting literal imprisonment, as the “type of stocks in which a person's hands or feet were secured in holes; (also) the holes in which a prisoner's hands were secured during flogging.”

A later definition speaks specifically to type—as the rare typographic term referring to an “excessively wide space between two words.” In addition to functioning in punitive and

correctional modes, pigeonholes also became implicated in play—as a lawn game “popular in the 17th and early 18th centuries, in which balls were bowled at targets (probably small arched compartments).” Another variation generalizes pigeonholes as “small hole[s] for looking through, or through which something may pass or be passed.” There are eight definitions total, most based on some relationship or visual resemblance to the original structure for breeding and domesticating birds. Two of the later linked definitions are the most prevalent in contemporary use—definition 6A, “One of a series of open compartments in a desk, range of shelves, etc., used for storing or sorting mail, papers, goods, etc.” and 6B,”A theoretical compartment or division; a fixed category or role into which a person, thing, idea, etc., is classified.” An earlier definition, 1C, offers a similar specific take on the familiar figure: “To assign to a particular category or class, esp. in an excessively rigid or presumptive manner; to label or categorize mentally.”

Academic writers are often pigeonholed in this sense, as their work requires homing in on topics to an infinitesimal level, and bringing contributions and messages back to home discipline(s). In this way, the work of academics can both celebrated and critiqued in a way connected to birds all of the time. The first definition of the transitive verb form of the word is tied, too, to this action of “sort[ing] by using pigeonholes,” and “More generally: to put away in the proper place for later reference.” This sense of “proper place” brings us back to another sad facet of pigeonholing and historical pigeon-keeping—namely, the class politics of the practice.

While the Romans mastered a crude form of battery farming in their columbaria, replete with tactics such as breaking birds' legs "to do away with all excess of exercise,” feudal lords of Medieval Europe took pigeon-raising to a new level with diverse and freestanding dovecotes (Cooke 12). These open-aired pigeon-homes, of different sizes, shapes (circular, square, octagonal), and building materials (wood, stone), dotted the Italian, French, and English

countryside. Dovecotes were a privilege reserved for the upper-class—in France and England only "landed proprietors" could keep pigeons (18). There were regional restrictions not only on who could own dovecotes, but on where they could be built, whether on public land or private property. In England, the higher your income, the more pigeonholes one might legally be allotted (20). Large dovecotes on monastery grounds supplied pigeon meat to surrounding communities (Allen 97). Though peasants were "forbidden by law to keep pigeons," pigeons were not forbidden on peasants' farmlands (Humphries 15).

In fact, noblemen encouraged their pigeons to forage off of poor farmers' grains by keeping the birds slightly hungry at home—much to the wrath of the peasants who later "destroyed noblemen's pigeon houses as a sign of opposition" (ibid). Thus, the French Revolution featured "pampered pigeons massacred alongside their noble protectors" as "symbols of oppression" (Field 9). Escaped pigeon-survivors from this time of turmoil are direct ancestors of our feral pigeons today—birds that still hover "between wildness and domestication" with the "ability to bridge two worlds" (Humphries 62).

Of so-called old and new worlds, the tyrant long-credited for “discovering” the Americas, Christopher Columbus—whose last name is derived from the Latin word for dove—introduced common pigeons to the Caribbean in 1493 (Allen 98). The first *Columbia livia* on record as reaching the North American shore entered on a French ship navigated by Samuel de Champlain in 1606. Pigeonholes were promptly constructed for the birds imported to the New World, as "familiar symbols of an upper-class lifestyle" (Humphries 12). In England, the structures also lived on as the "showpiece of every fashionable estate" long after the decline of squab popularity in the late seventeenth century (11). As with people—and as a result of socializing with people—pigeons have had a strange relationship with privilege, and with its fluctuating

constructions and contradictions. "Similar to many in society," they are now "on the edge, unnoticed, yet vital in the history of civilization" (Allen 10).

+ + +

"If n > m pigeons are put into m pigeonholes, there's a hole with more than one pigeon."
– The Pigeonhole Principle

+

Dovetailing

Beyond "homing in" and "pigeonholing," the pigeon is also the muse credited with "dovetailing." "Dovetailing" distinctly reckons with joinery rather than the division of "pigeonholing," yet both avian-derived concepts appear in everyday language *and* in specialized concepts in the realms of mathematics, computer science, and furniture carpentry. The latter is the most common, referring to a specific type of interlocking joint involving "a tenon cut in the shape of a dove's tail spread, or of a reversed wedge, to fit into an indenture or mortise of corresponding shape," or the "mortise shaped to receive such a tenon" (*OED*). As early as 1600, "dovetail" has been used to describe structures resembling "the shape of a dove's tail." The term has referred most commonly to the woodworking joint since the 17th century, and in a 18th century usage example, Joseph Gwilt writes in the first edition of *An Encyclopædia of Architecture* (1842) that the dovetail "is the strongest method of joining masses..."

The term has seeped into human lexicon in more embodied ways, as an anatomical term for a "serrated articulation or suture, as in the bones of the skull," moving fluidly between joints of wood and joints of the body. It is not the only element of human anatomy to be named after bird parts. The Greek physician and philosopher Galen called the tailbone "coccyx" after the Greek word *kokkyx,* or "cuckoo (from *kokku*, like the bird's English name echoic of its cry), so called...because the stunted, coalesced tailbones in humans supposedly resemble a cuckoo's

moderately curved beak" (Harper, Etymonline).[14] Legend also attributes to Galen the naming of the "coracoid process of the scapula" as such "for its resemblance to the beak of a crow or raven," but anatomical experts believe "the process doesn't really resemble anything of the sort: the coracoid has a prominent hook and a blunt tip," and "neither feature is seen in a corvid's beak" (Carpenter).[15]

Regardless of manifestation, dovetailing in nearly[16] every sense involves a strong bond, and the piecing together of sometimes disparate items and ideas. One verb form definition of "dovetail" calls it a means to "unite compactly as if by dovetails; to adjust exactly, so as to form a continuous whole." Another, "To fit into each other, so as to form a compact and harmonious whole or company." There is a strength and resilience embedded in the use of the dovetail, in the interlocking of different forces to reinforce a thing or a theory. Naturally, the positive force of "dovetailing" is fueled by the prefix-presence of "dove," while the less productive "pigeonholing" derives from and derides the poor pigeon yet again.

+

"The carpenter, by contrast, must contend with the material resistance of his or her chosen form, making the object itself become the philosophy" – Ian Bogost

+ + +

---

[14]I initially learned of the coccyx etymology on the March 5, 2019 episode of the "Ologies" podcast on "Etymology," where host Alie Ward interviews etymologist Helen Zaltzman of "The Allusionist," and exclaims, "Your butt bone's a bird beak!"

[15]This section is derailing into a substantial enough aside that I should note here I'd like my next project to be on "quackery" and human-ornithological anatomy and healing.

[16]The one exception is definition two of "dovetailed" as an adjective referring specifically to "Heraldry," where it means "Broken into dovetails, as a dividing line." A 1766 usage note on from Marc Antoine Porny [pseudonym]'s *The Elements of Heraldry,* has "Dove-tail" taking on this more pigeonhole-esque definition, "to denote a kind of Partition, wherein the two different Tinctures are set within one another, in such a manner, as to represent the form of the tails of Doves or Wedges reversed" *(*qtd. in the *OED*).

Mess[ag]ing

I love pigeons as a model because they're messy. These messengers are "notoriously sloppy" nest-builders, and in the wild, the feral birds' homes are often "slipshod affairs" made "with whatever materials are available," occasionally including the "mummified bodies of their dead young" (Humphries 119). The marginal birds of today nest with scraps found on building ledges, scavenging sidewalks for crumbs.

Recall that in furniture carpentry, pigeonholes became the names of popular organizational units in writing desks and cubbyhole mailboxes, in these common structures often held together with dovetailed joints. There is some irony in naming an ideal model of organization after the notoriously messy pigeon's human-built home. Nevertheless, an organized desk with reading and writing materials filed away in pigeonholes cannot be separated from the messes made accumulating these materials in history.

The height of Medieval pigeon-keeping, after all, coincided with the heyday of parchment, when a book was essentially a "stack of dead animal parts produced from and at the expense of animals" (Holsinger 619). In bookmaking, pigeons perhaps played a minor role, but it is one connected to their natural mess: pigeon dung removed hair from animal skins, softening leather in the tanning process (Allen 100). Leather was used, of course, to bind books.

This is not to say that desks could not be messy in their own ways—while desks with basic pigeonholes had been constructed since at least since colonial America, Victorians capitalized on complex designs with hidden compartments and swinging doors. A model by the Wooton Office Desk Company, for one, boasted a "large number of pigeonholes and shelves in full-front doors which could be opened to reveal even more pigeonholes and shelves in the carcase of the desk" (Walter 21, emphasis added). The company made an ambitious 1894 claim that their "celebrated Desks" would "produce a complete revolution in Office Desks"—and

indeed, it enjoyed great popularity as a "durable desk which appealed to many businessmen in the third quarter of the nineteenth century," featuring a "combinations of design," which suited Victorian tastes (ibid).

+ + +

Another hobby which heavily reflected the Victorians' exuberance for "combinations of design" was Victorian fancy pigeon breeding. The practice suited the society at large, "which valued the ability to control and shape nature"—and if nothing else, "a fancy pigeon was a testament to human ability and creativity" (Humphries 26). The resulting cross-bred pigeon oddities served as materials of filing and writing explicitly and specifically in the scientific realm—when Charles Darwin, alongside other gentlemen of his time, "studied the art of editing, revising, perfecting pigeons into novel forms: Carriers, Barbs, Pouters, Fantails, Baldheads, Toys, Runts, and the famous Almond Tumblers" (Field 10).

A few of these birds were described by a Victorian gentleman himself as the "grotesquely-strutting Powter, the comely Turbit, the gay and frisky Tumblr, the stately Swan-like Fantail" (Dixon 9, images of pouters and fantails are from Darwin's *Variations of Animals and Plants Under Domestication* and Google Image Search). When Darwin set out to publish his results in *On the Origin of Species*, geologist Charles Lyell and other friends cautioned him against sharing his controversial theories, suggesting he focus "solely about pigeon breeds" instead, and another editor agreed, "Everybody is interested in pigeons" (Jerolmack 10).

Birds in general were popular among the Victorians—plentiful in literature, art, nature, and strange combinations thereof—and the natural history of the day was highly anthropomorphic. Indeed, Victorians tended to take an "emotional approach to ornithology," as birds were “classified into personality types: character was examined and stereotypes were

established" (Schefer 19). Pigeons, which mate for life after a courting ritual of kissing and feeding, were labeled as "amorous, beseeching, full of affectionate attachment," while doves were "created as types almost of Christian virtue" (Dixon 2).

Darwin, however, had chosen pigeons as his subjects of study only "because the evidence that all the domestic races are descended from one known source is far clearer than with any other anciently domesticated animal," among other practical reasons (Darwin 137). Though he had no strong affective ties entering his project, he appeared to grow fond of his birds, even inviting Lyell over in 1851 with the exuberant note, "I will show you my pigeons! Which is the greatest treat, in my opinion, which can be offered to human beings."

Alas, any emotional attachments Darwin developed to his birds were severed upon the completion of his studies. From a letter to William Tegetmeier (of *The Poultry Book* fame) in April of 1858: "In about six weeks' time I shall go over all of my Pigeon M.S. & shall then dispose of all my Birds." Darwin offered his remaining pigeons to Tegetmeier with the disclaimer that "few…will be worth your acceptance," but "All my many crossed Birds I will kill, for I presume these cannot be worth anything to any body" (Darwin qtd. in Humphries 188). After Darwin's carefully-crafted experimental pigeons served their primary purpose of proving his evolutionary theories, the use value of these mixed-blood birds had expired, and they could be culled without remorse or regret.

The value of the lives of pigeons has fluctuated unpredictably across times and contexts. Superstitious pigeon-keepers in the ancient past cared for their birds enough to bury mummified kestrels in jars around their property as charms to fend off predators (98). In stark contrast, most pigeons we encounter today are labeled with "Do Not Feed" signs, and as with starlings, some cities even implement extermination programs after nets and spikes fail to deter pigeons from

inhabiting spaces humans crave total control over.

+ + +

Passing

Of pigeons and death, two species in the pigeon family have already been demolished in entirety by human greed: the dodo and the passenger pigeon.[17] The extinction narratives of these ill-fated pigeons are two of the most oft-repeated cautionary tales demonstrating the irreversible devastation humans have inflicted on the natural world. According to Ursula Heise in *Imagining Extinction: The Cultural Meanings of Endangered Species* (2016), the dodo's 17th century extinction was the first species death which could clearly be attributed to human intervention, modernization, and colonization, whereas the passenger pigeon extinction in the 20th century is now the "most often mentioned in discussions of extinction in the United States" (Heise 43). Because the details of the latter's tale have been retold so many times already, Heise doesn't dwell on them, but does cite historian Jennifer Price's analysis of their narrative, noting that the passenger pigeon's extinction "cut…not just the ties to nature that America cut in its modernization, urbanization, and technological advancements," but also "particular stories about these ties, so that thinking about extinction becomes a story about the loss of stories" (Heise 44-5). This, Heise believes, is a "distinctively postmodernist and metafictional twist" (45). Heise's book powerfully unpacks several extinction narratives along these lines with depth and nuance which are often conjured in forums around extinction studies. Still, I find myself drawn over and over again into these symbolically potent classics she glosses as, in some ways, overdone. Maybe this overdone-ness and the nature of this obsessiveness as manifested across iterations of

[17]This section is adapted from a talk I delivered at the Rhetoric Society of America (RSA) conference in 2018, "To Go the Way of the Dodo—On Pigeons Passing [Notes]."

its representation is exactly what drives my curiosity. Like Eve Kosofsky Sedgwick, "I'm fond of observing how obsession is the most durable form of intellectual capital" (Sedgwick 2).

Dodos, the tall, plump, ground-bound species first described in 1598 by Dutch mariners visiting the island of Mauritius, were gone less than a hundred years after human contact. The birds were abundant and easy to catch, meaning invasive pets and pests the sailors brought from home along with the men themselves caught and ate the birds and their eggs until none were left. The exact time of dodo extinction may never be known without doubt, but it is believed they died out between 1662 and 1693, with the final reports of living birds ranging in the 1680s.

The Oxford Museum of Natural History holds the only surviving soft tissue dodo remains in their collections. Of the vast population, all that remains of this Oxford dodo include the "skull with left side of skin, the sclerotic ring from the eye, the skeleton of the foot, the sectioned femur, a feather (removed from the head in 1986), and various tissue samples taken over the years" ("The Oxford Dodo"). The bird lived in a time prior to the modernization of taxidermy techniques, and this one was in such poor conditions that it was sent to be destroyed by fire—thankfully, a new staffer, William Huddersfield, had the foresight to save the specimen's head and right foot (Staub). Today, what remains of this artifact is treasured so carefully by the University Museum of Zoology in Oxford that when Eric Dorfman, the director of the Carnegie Museum of Natural History in Pittsburgh, tried to borrow these bits for the United States' first exhibit on the Anthropocene ("We Are Nature," 2017), the cost and logistics were too extravagant.[18] Full-time staff chaperones would need to be flown out with the bit of flightless bird, and accompany it closely for the brief period it could remain overseas. It is so strange yet so

[18]I gathered this anecdote in fragments from various Pittsburgh birding community hearsay, including in passing (but without much detail) from Eric Dorfman himself during a museum visit with the Collecting Knowledge Pittsburgh group's summer workshop on "Consuming Nature."

human that we only care about what remains of this bird after death, and after demolishing its entire species in life. Ultimately, the Carnegie Museum stuck to exhibiting our home collection's existing dodo reconstruction, which as with all reconstructions of dodos in existence, is represented with questionable accuracy.

In *Dodo: From Extinction to Icon,* writer and artist Errol Fuller marvels at how many books have been written about dodos when what we actually know about the birds is so little and sourced from such "meagre source material" that it "could be squeezed into a few paragraphs." As a result of this, he considers much of this work "fairly pointless literature [that] is as ponderous as the bird itself…poorly written, badly thought through, wildly eccentric and inaccurate" (Fuller 48). He wonders, "Why should such nonsense be told about the dodo by serious men?" and suggests that "Perhaps the loss of this creature affronts people" so deeply that "there is a genuine psychological need to somehow re-invent the living bird" (153).

A similar need to "re-invent the living bird" has manifested more aggressively in the tale of the passenger pigeon. Much more is known about this comparatively recent casualty, and genetic materials are plentiful. This means at least one group of researchers led by a non-academic enthusiast has been conducting research with the questionable end goal to de-extinct the bird. The "Revive & Restore" team is a controversial San Francisco non-profit led by Ben Novak, one such enthusiast who is convinced he will live to see passenger pigeons revived to life and restored to the wild using one of several experimental methods (Gewin and Biello). While some are enchanted by the possibilities of resurrection science, many more question the ethical implications of doing this work, which in terms of conservation, would only bring more human-caused upset and a new array of consequences to a world already in turmoil. Something about the aftermath of these tragedies leads to actions that might be viewed as wildly eccentric

nonsense to some, and scientifically rational to others.

Dodos and passenger pigeons both number as members among the three-hundred-plus species in the *Columbidae* pigeon family. This affiliation is uncontroversial today, but when Copenhagen curator John Theodore Reinhardt first posited in the 1840s that dodos were large, flightless pigeons, he was widely mocked. Many believed the mysterious birds were connected to ostriches or vultures, and due to how little evidence existed, both the colloquial and scientific names of the dodo have caused confusion. The primary scientific name used today is *Raphus cucullatus*, with *Raphus* referring to bustards, and *cucullatus* as "hooded" in Latin. However, when Linneaus standardized binomial nomenclature in *Systema Naturae*, he first called the dodo *Struthio cucullatus* in 1758, with *Struthio* referring to ostriches, and later simply *Didus ineptus* in 1766, which translates to "inept dodo." There is, indeed, an unfair reputation of the dodo being both rotund and inept (Fuller).

Human knowledge-making has relied extensively on visual artifacts, so substantial, inconclusive analysis has been performed on dodo art through the ages. A dodo watercolor by Cornelius Saftleven from 1638 is believed to be one of the most accurate depictions of a living bird, but memorable and exaggerated paintings of rotund dodos by Roelandt Savery and his nephews were adopted by Lewis Carroll's illustrator for *Alice in Wonderland*, and became circulated most widely for public consumption. Thus, the tone of the sort of art that dodos inspire are often ironically comical as they always operate with the darker undercurrent of their mass deaths in mind—the birds are seen as evolutionary duds, portrayed as dumb, fat, and incapable of survival. The *OED* traces the colloquial name's etymology to the Portuguese word *duodo* meaning "fool," but I've also encountered theories that dodo could come from two different Dutch words—"dodoor" for "sluggard" and "dodaars" for "knot-ass" or "fat-ass." Fuller

furthermore suggests: “In the Dutch language dodo is an anagram of *dood*—which means dead. In English the expression ‘as dead as a dodo’ is universal’...” (Fuller 13). Humorist William Cuppy joked in 1941 that “The dodo never had a chance. He seems to have been invented for the sole purpose of becoming extinct and that was all he was good for” (Cuppy 163).

We now know that the closest living relative to the dodo is the Nicobar pigeon and that there are a few other extinct dodo-esque birds it has been linked to, such as the Liverpool pigeon and the Reunion ibis. In our hierarchy of extinct birds in popular culture, however, these hardly rank. Indeed, as Heise reminds us, we often forget the numbers of less flashy organisms that have gone extinct and stick to “stories of flagship species” that “function synecdochically by pointing to a broad crises in humans’ interactions with natures” (Heise 36).

The way humans interacted with passenger pigeons were both predictable and despicable, and echoed of the patterns found in the days of the dodo. The passenger pigeon was the most abundant bird native to North America when the Europeans arrived. The *Ectopistes migratorius* numbered in the billions, and the birds were open source easy targets. They could be "hunted for food and belonged to no one" while rock pigeons had to be "bought and bred" (Humphries 13). As new settlers continued to build houses for themselves and their owned birds, they also deforested and destroyed the homes of passenger pigeons until the native species went extinct (13).

It is said that the pair of passenger pigeons painted in John James Audubon’s national treasure of a multivolume tome, *Birds of America,* were painted in Pittsburgh on his 1824 visit. He beautifully wrote later in the accompanying *Ornithological Biography* that a single passenger pigeon in flight “passes like a thought.” Audubon, a name linked to conservation today who in his life claimed, “I call birds few when I shoot less than one hundred per day,“ famously recalled

that passenger pigeon flocks were so thick that they darkened the skies, and he was only one of a few writers who would document with awe how thick flocks could cloud the skies for days, and a single random gunshot could take down enough birds to feed families.

Returning to names, what is unusual in the case of the passenger pigeon is that not only do we know the exact details of their species dying out, but the final living avian individuals were named. The world mourned when the final passenger pigeon, Martha, named after Martha Washington, passed away in the Cincinnati zoo in September of 1914. Today, the bird continues to pass her days in care of the Smithsonian's collections, and she remains as a relic, a message, a cautionary tale.

For the centennial in 2014, Michael Pestel created an art installation commemorating the passing, which Cary Wolfe analyzed in "Each Time Unique: The Poetics of Extinction," published as an essay in Michael Lundblad's *Animalities: Literary and Cultural Studies Beyond the Human* (2018). In it, Wolfe describes the ways in which Pestel inventively showcases how three main technologies contributed to the passenger pigeons' demise: the rifle, which killed birds, the railroad, which brought hunters to roosts and shipped refrigerated squab, and the telegraph, which facilitated the communication and planning that led to the destruction of the species and their habitats. Wolfe offers readers series of provocative questions, among them this:

> What is Martha, exactly? A pet? A fetish? A curiosity? A relic? We might say that her captivity, display, and proper name attempt to turn her into all of these things, but these compensatory gestures only underscore all the more that this is a case of fetishistic disavowal, not only of our own grotesque role in the extinction of her species, but also of our own finitude in relation to other forms of life, which calls forth these compensatory attempts to 'curate,' you might say, the boundaries between life and death, survival and extinction (30-1).

The passenger pigeon's names, scientifically, are so straightforward they're almost redundantly so. In Joel Greenberg's *A Feathered River Across the Sky: The Passenger Pigeon's*

Flight to Extinction, he notes that "Passenger pigeons" were "birds of passage, and their common name reflects this. The genus *Ectopistes* is based on a Greek word for 'wanderer,' and the species *migratorius* is Latin for 'one that migrates'" (3). The common name even more appropriately comes from the French *passager*: "to pass fleetingly."

The *OED* links to individual etymologies of "passenger" and "pigeon," but it is worth noting here that deep in the etymology section of "pigeon" is buried a 15th century connotation of pigeon as a "naïve, gullible person." The rampant anthropomorphism and anthropocentrism that has shaped our relationships with and rhetorics around these birds is astoundingly consistent through the centuries. I linger here as a reminder that the power of naming, and of onomastics, the study of names, is always a good place to dwell in talking about human relationships to and rhetorics around animals.

When humans name animals, whether as collectively, categorically, or individually, we exert our power over the other species in a specific way, and it is easy to take names for granted when we don't linger on this. As Star Medzerian Vanguri asserts in the introduction to her 2016 edited collection on *Rhetorics of Names and Naming*, "Names invent our reality" and "those who name are generally in positions of power" (8). Thus, the act of naming itself can have powerful implications and effects linked to ideas and realities of ownership, knowledge-making, and more, in myriad ways across diverse contexts (4).

What these extinct pigeon stories reveal to me in their parallel patterns are not just a deep sense of regret and reaction to consequence but even more fundamentally a human inability to deal with a lack of power, control, and mastery over what remains of these species. This plays into why, in my work, I often prefer presenting archives and stories without offering conclusive arguments and specific takeaways. I want to allow breathing room for open interpretation, and to

end, I want to gesture, too, to the possible productivity in the idea of "narrative justice" that Andrea Lunsford discussed in the powerful keynote she delivered at the 2018 conference of the Rhetoric Society of America, the night before I gave my original talk on this subject, from which this section is adapted ("To Go the Way of the Dodo—On Pigeons Passing [Notes]").

In brief blog entries revisiting the topic, Andrea Lunsford discusses the eternal and universal need for storytelling as a way to help us "understand the world and ourselves in it" (Lunsford, "The Need for Narrative Justice"). She critiques the presence and prevalence of single master narratives which dangerously "spread misinformation, distortions, and even lies" across dominant culture. To achieve narrative justice, she reminds readers that these false stories need to be undone and replaced by inviting and assembling "alternative narratives that do justice to the truths of lived experience and that reflect their deepest values, their best sense of self, their vision of a just society" (ibid). The concept of "narrative justice" initially emerged through "global health initiatives that aim to allow indigenous people to claim and tell their own stories" (Lunsford, "Can We Achieve Narrative Justice?"). However, it is useful as a more generalizable concept to think through narrative assemblage—to avoid "single stories" and "master narratives," and examine experiential truths through multiple perspectives. While these original contexts are more concerned with human-centric stories on societal concerns, "narrative justice" is by nature capacious enough to accommodate attending to multispecies tales.

\+ + +

"I have been feeding pigeons, thousands of them for years. But there was one, a beautiful bird, pure white with light grey tips on its wings; that one was different...a female. I had only to wish and call her and she would come flying to me. I loved that pigeon as a man loves a woman, and she loved me. As long as I had her, there was a purpose to my life." – Nikola Tesla

Pigeon fanciers have often been pigeonholed as eccentrics[19]—even Darwin called them "odd" after joining two gentlemen's clubs devoted to the birds during his research (Humphries 28). Scientists, especially, who have attempted to harness the power of pigeons for use in human tasks have a history of facing derision by target audiences, on account of being dubbed strange, if nothing else. The respected psychologist B.F. Skinner, for one, received skepticism when he proposed "Project Pigeon," a mission to condition pigeons to guide World War II missiles. Although the National Defense Research Committee initially offered Skinner $25,000 in 1940, and the pigeons—which Skinner "kept in his backyard dovecote"—were cooperative and successful in training, the project was later re-evaluated as "too eccentric and impractical," and canceled on October 8, 1944 (Blechman 37; Hoggott). Granted, Skinner had also tried to "teach his pigeons to play a crude form of Ping-Pong..." which doubly caused colleagues to question his reputation as a serious scientist (Blechman 37).

The visual acuity, persistence, and cooperation of Skinner's pigeons, at least, may not have gone completely unnoticed. According to the U.S. Coast Guard website, the World War II-era pigeon conditioning inspired a new effort: "Project Sea Hunt." Developed in the late 1970s to early 1980s by Navy scientist Jim Simmons, pigeons were conditioned to "conduct search and rescue from Coast Guard helicopters." These pigeons could locate floating objects at sea with 93% accuracy and low false positive rates, while "human flight crews were accurate 38% of the time." Thus, "combined with human searchers, the pigeons' success rate was nearly perfect."

---

[19]Nikola Tesla was one such eccentric, and certainly more room should be devoted in this chapter to his unquestionable love for pigeons—and more questionable love for one pigeon in particular—as another biography with a fascinating blend of facts and fact gaps. An excellent take on the topic can be found in *Cabinet:* http://www.cabinetmagazine.org/issues/55/pettman.php, and many historical *New York Time* articles can be found on the topic. The affair has also inspired projects such as this song composed from the point-of-view of the beloved pigeon: https://www.youtube.com/watch?v=j5CfnJTR3Sg. Of pigeons and love affairs, another topic which deserves much more attention in this project is the Japanese cult video game, “Hatoful Boyfriend,” a narrative RPG in which a human schoolgirl attends St. PigeoNation's Institute, a school for birds, and dates pigeons. The strange but light-hearted premise takes a dark turn after some six hours of play, when it is revealed that the story takes place in a dystopian universe after bird flu has wiped out humankind, among other things...

Alas, the project died with federal budget cuts in 1983, and the birds "never did get a chance to save any lives" ("Pigeon Search and Rescue Project").

Human-composed pigeon paradoxes are innumerable, and span time and space. Despite their reputation as "pigeon-brained," after all, pigeons have succeeded uncannily at many miscellaneous tasks humans have assigned them, from recognizing all twenty-six letters of the English alphabet in the 1980s[20] back to launching Paul Reuters' global news agency in 1851 (Humphries 44). Though Samuel Morse developing the telegraph in the 1830s to 40s meant there was a mode of communication faster than pigeons for the first time, Reuters capitalized on a six-month gap in telegraph service in 1851, and "parlayed the use of pigeons in what would become the world's largest news-gathering organization" (Blechman 31).

Almost all of the modern pigeon projects detailed above (and plenty beyond) failed at least partially due to apparent and unexamined human skepticism. Though pigeons are stellar performers in studies, often to an uncanny degree, support for projects in which the birds have been enlisted (and arguably exploited) are consistently cut. Pigeons are rarely given the chance to persuade broader audiences that they can accomplish even a fraction of feats in their trained repertoire—feats almost exclusively to the benefit of humans.

However, pigeons were still relied on and recognized for saving countless lives between the two World Wars in their classic, uncontroversial roles as (98% successful) mail carriers (Blechman 32). The single most cited pigeon victory occurred on October 27, 1918 during the Battle of the Argonne in World War I, when U.S. members of the 77th Division "Lost Battalion"

---

[20]After "Pigeon perception of letters of the alphabet" was studied by D.S. Blough in 1982, there were evidently decades of interest in how much of the human English language pigeons can learn. A group led by Damian Scarf published a more recent study on "Orthographic processing in pigeons (*Columba livia*)" in July 2016, inspiring a flood of trending, sensationalistic headlines announcing that pigeons can (sort of) read.

were trapped behind enemy lines at Grand Pré, with allies firing at them, mistaking them for enemies from twenty-five miles away (Allen 114). All the pigeons the troops released were immediately shot and killed except the last one released, Cher Ami, who despite injuries, flew to home base in twenty-five minutes with "one eye and part of the cranium blown away, and its breast ripped open" (Blechman 33). The message it carried dangling from "a few tendons… that remained of the bird's severed leg" was received just in time: "Our artillery is dropping a barrage on us. For heaven's sake, stop it!" (ibid). Cher Ami soon died of her battle wounds, and now perches with one foot on a mount, again taxidermized in the Smithsonian's collection.

+

"'If we take a pigeon as an example…' Even Aristotle used pigeons to illustrate the four causes of existence: the motive cause, the material cause, the formal cause, and finally the fourth and final cause: the perfected pigeon whose perfect ending was her benefit to Man" – Thalia Field

+ + +

Healing

Pigeon lives have likewise been sacrificed for the benefit of mankind as medicine. In ancient Roman times, Pliny documented many pigeon health tips, such as suggestions to ingest pigeon blood as "a means of curing bloodshot eyes" (Allen 88). The medicinal value of pigeons has been reiterated and revised for centuries since. "Blood put warm into the eyes allays pain, cures blear[y] eyes…" is a variation included in a lengthy list of cures from the eighteenth century manual. The same text tells readers to press a pigeon's anus to a snakebite to draw out its poison, among other pragmatic gems (Moore 22). A nineteenth century highlight includes vivisecting a live pigeon "along the back-bone," as when "clapt hot upon the head, [it] mitigates fierce humors and...melancholy sadness" (Dixon 173). Squab, the meat of young pigeons, has historically been served to the ill as an easily digestible protein source—and at one time, it was thought to help prevent plague.

In the early 1900s, the apothecary Julius Neubronner used pigeons for pharmaceutical deliveries—and became best known for patenting his invention of aerial pigeon photography in 1908, strapping a small camera onto a bird's body and giving us literal birds-eye-view photography for the first time. In the contemporary moment, pigeons' bodies became used to carry increasingly advanced human technologies.[21]

In addition to healing human bodies, the homing of pigeons has been leveraged in efforts to study and heal societal and environmental ills. The "PigeonBlog" project (2006) led by interdisciplinary artist Beatriz da Costa (who sadly passed away in 2012), in partnership with Cina Hazegh and Kevin Ponto, was a prime example of this. In the project, a so-called "collaborative endeavor between homing pigeons, artists, engineers and pigeon fanciers," pigeons were equipped with little wearable packs of "custom-built miniature air pollution sensing devices," which were programmed to transmit "collected localized information to an online server without delay," allowing pollution levels to be "visualized and plotted in real-time over Google's mapping environment," and "allowing immediate access to the collected information to anyone with connection to the Internet" (DaCosta, et al). As one reporter noted in covering the launch, "When Beatriz da Costa releases 20 pigeons into the smoggy skies of San Jose, California in August, the flock will be writing what might be the world's first avian blog—one offering a bird's-eye perspective on air pollution" (Gertz).

In an artist statement provided by da Costa, et al. entitled "INTERSPECIES COPRODUCTION IN THE PURSUIT OF RESISTANT ACTION," presented in all-caps,

---

[21]There is an April Fool's joke proposal called "IP over Avian Carriers" (IPoAC) to "carry Internet Protocal (IP) traffic by birds," which inspired a marketing team to race a pigeon with a microSD card loaded with 4 gigabytes of data against a Telkom ADSL line; the pigeon won the data delivery race. See the Wikipedia entry for a full account: https://en.wikipedia.org/wiki/IP_over_Avian_Carriers

daCosta et al. emphasize the non-expert, citizen scientific, and general access-focused priorities of this "grassroots scientific data gathering initiative designed to collect and distribute information about air quality conditions to the general public." The artists ask: "How could animals help us in raising awareness to social injustice?" A series of multilayered questions are posed, many unanswerable, and by the conclusion of the statement, daCosta has fully addressed her position as a "creative" in relationship to the project. Frustrated by the ways in which the media coverage shaped her university affiliation and "researcher" label as scientific as opposed to artistic research, she ends with that all-too-familiar situating disclaimer:

> Rather than dedicating myself to a scientific justification of PigeonBlog built within the university research environment and its related publication venues, I am hoping that this approach will be more true to PigeonBlog's original aim in situating itself between the academy and non-expert participants.

\+ + +

Mastering

It is unsurprising that there have been countless formal academic scientific attempts to get to the bottom of pigeons' enigmatic, potentially magnetic homing instincts, alongside experiments performed to test their senses and intelligence. Italian scientist Anna Gagliardo published an article in the *Journal of Experimental Biology* in 2013 on "Forty Years of Olfactory Navigation in Birds," noting that the role of a strong sense of smell had been overlooked, and olfaction may play a surprising role in assisting pigeons in ascertaining their routes. In her experiment, she took forty-eight young homing pigeons, "cut the nerves that carried olfactory signals to their brains" in half of them, and "the trigeminal nerve…linked to the part of the brain involved in detecting magnetic fields" in the other (McKie). The birds were released thirty miles away, and while all but one of the birds deprived of their ability to detect magnetic fields made it home, only four without a working sense of smell returned. This was the first experiment in

which magnetic sensing and smell were tested alongside each other, and it was concluded “that pigeons read the landscape as a patchwork of odours” (McKie). Gagliardo has since done even more focused work with the Marx Planck Institute for Ornithology, and “recently demonstrated that pigeons navigate more poorly with their right nostril blocked” (Wikelski). This suggests that the “left brain hemisphere, where olfactory information is processed, is of fundamental importance to the orientation and navigation of homing pigeons” (ibid).

It is worth noting that despite the many scientific mysteries wrapped up in the bodies of these birds, the treatment of feral pigeons as scientific subjects is controversial in the ornithological realm. As pigeon expert Richard Johnston explains to science writer Courtney Humphries, "Professional ornithologists as a group consider feral pigeons to be almost un-birds" (Johnston qtd. in Humphries 104). He was proud to treat "them like they were real birds," noting in addition that it was domestication which "gave pigeons the ability to become the superpower they are today" (Humphries 104). Humphries also approached another biologist, Louis Lefebvre, asking why "few scientists seemed interested in studying feral pigeons" (110). Lefebvre cited the history of dovecote domestication as the exact reason he stopped working with them; as a totally "unique case in nature," the birds are not "representative of anything" (111). Since their "time in captivity may actually have made pigeons more innovative than their wild brethren," pigeons do not follow "the usual pattern of innovation in birds." When it does something, it does so "not just because it's a pigeon…[but] partly because of that very specific regime of domestication that it went through for thousands of years" (Lefebvre qtd. in Humphries 113).

What naturalist Comte de Buffon conjured in his eighteenth-century passage on the pigeon's state of then-easy existence comes to mind, of pigeons as "rather voluntary captives, transient guests, who continue to reside in the dwellings assigned them only because they like it

and are pleased with a situation which affords them abundance of food, and all the conveniences and comforts of life." Even today, these liminal birds live alongside us in city streets, and "humble our efforts to place a firewall between 'urban' and 'natural'" (Jerolmack 11).

I think the sentiment John Greene expressed in his podcast about how "even if they've become mundane…geese still feel wild to me" could easily be transferred to pigeons—for many people, they are the urban wild. Pigeons have long been featured in and have fostered an enormous range of human communications. Beyond texts, they populate our streets, our lives, and every city and city-dweller has a pigeon story, if not a collection of them. After the pigeon post became phased out, the sport of pigeon racing emerged in 1850s Belgium. Aficionados were motivated by a passion for pigeons, as well as prize money. The now-controversial sport spread across Europe, and many European migrants brought their birds to the United States. This is how Pittsburgh, PA—whose abundant job openings in factories and steel mills attracted immigrants—became an epicenter for American pigeon racing in the following century. I will turn now to my local archives, with my city's pigeon tales.

+ + +

There is an abundance of unexpected poetry—intentional and unintentional, whimsical and solemn—in the five boxes of materials compiled over sixty years by Pittsburgh pigeon racer John Yodanis (1910–1988). Housed in the Heinz History Center's Detre Library and Archives, these containers are packed with documents, from pigeon breeding guides to lineage charts, racing diplomas to gift-like bundles tied up in paper and string, which unwrap to reveal piles of pigeon-centric newspapers, catalogues, convention yearbooks, and more.

The American Racing Pigeon Union (ARPU)'s Souvenir Book of the 1937 Greater Pittsburgh Convention opens on a charming exchange of two epistolary poems between Edgar A.

Guest and Peter P. Barry. Guest's four stanzas of aa/bb rhymes, addressed "To the Owner of a Homing Pigeon," detail the antics of a pigeon who "stopped to spend the day with us." Barry responds to thank Guest, and requests he "Do again that sportsman's deed,/Give him water and a bit of feed," if the pigeon again chooses to rest upon his roof on his route home.[22]

"Pittsburgh Promotes Pigeondom's Progress" appears as a bold announcement in the opening pages of the 1948 commemorative book for the 38th annual American Racing Pigeon Union (ARPU) convention, and the 4th annual "Ladies Auxiliary" meeting. Several pages of a welcome essay boast, of all the sports in Pittsburgh, "One of the finest sports of all, the realm of Pigeondom, is enthusiastically proclaimed by a great number here." The Pittsburgh Center of the ARPU was the largest in America at the time, with thousands of members within a 50-mile radius of the city. John Yodanis was inducted into the sport by his father and brother at age 14 in 1924. One of the collection's final news clippings, from 1984, features the 74-year-old retired steamfitter reflecting on growing up when "every other yard had a pigeon loft and the association of racing pigeon clubs known as the Pittsburgh Center had more than 2,400 members." Near the end of Yodanis's life, he estimated only "175 racing pigeon owners remain in the Pittsburgh area." Pigeon-racing is now considered an eccentricity in mainstream America, but there is still a dedicated demographic in the Pittsburgh area and beyond.

I spent a day visiting with the Tarentum Homing Club, whose members are majority male retirees; some have played the sport for long enough to recall Yodanis's coops. Speaking to these men, touring their coops, and perusing their records, it is striking how valuable these birds were and are to their caretakers, and how stark the contrast is between the dedicated treatment of these

---

[22]Some of this piece is copied/adapted from a *Constellations* blog post I published in 2017. https://www.constellations.pitt.edu/entry/revisiting-pittsburgh%E2%80%99s-pigeondom

pedigreed pigeons and the feral “rats with wings” marginalized in city streets and lawns today.

+ + +

“Pigeons on the grass alas.
Pigeons on the grass alas.
Short longer grass short longer longer shorter yellow grass. Pigeons
large pigeons on the shorter longer yellow grass alas pigeons on the grass.
If they were not pigeons what were they.
If they were not pigeons on the grass alas what were they…”
– Gertrude Stein, Four Saints in Three Acts

+

Easily, the most exquisite essay I encountered in the course of conducting pigeon research was Thalia Field’s "Apparatus for the Inscription of a Falling Body,” in the opening lyric in a mixed-genre creative text, *Bird Lovers, Backyard (2010).* It is rife with what I take to be facts—I cross-checked them all, where possible—but Field offers few footnotes and no cited obligations nor bibliographic ties at all. With poetry, of course, the citations are often peripheral to the point; and it stands to be said often that the poetry world is an unrelentingly bird-saturated one. Thus, it is only natural for pigeons to populate poems even more insistently than prose.

Pittsburgh-born Modernist poet Gertrude Stein authored an absurd libretto for Virgil Thomson’s experimental opera, *Four Saints in Three Acts*, which yielded this bit of poetry about “Pigeons on the grass alas” (as excerpted above, written around 1927 and 1928). Sibilant and leisurely in its uneven form, the catchy ditty seems to signify a familiar displeasure with the common birds; it’s more accessible and sensical than much of Stein’s admirable but often obtuse oeuvre. A short newsreel by Pathé Films of Stein reading and commenting on this excerpt was shown in theatrical promotional materials in theaters across the United States[23], and gained enough traction to command the attention of several comic voices (Leick 20). Jim Holt’s

[23]The clip can be seen with poor sound quality here: https://www.youtube.com/watch?v=TtV6f6ZIFdE

"Modernism Was Easy," for instance, featured a *Peanuts* cartoon with Charlie Brown muttering, "Beagles on the grass, alas," looking over Snoopy's napping form on the lawn (Holt).

James Thurber published a response to "Pigeons on the grass alas" entitled "There's an Owl in My Room" in *The New Yorker* in 1934, the same year *Four Saints in Three Acts* played on Broadway. Thurber takes umbrage with Stein's spoken rationale in her newsreel appearance, where she claimed the piece was a "simple description of a landscape I have seen many times" (Stein qtd. in Thurber). This is because, he believes, pigeons inspire no affect, no emotion; in his words, pigeons have "nothing to do with alas and they have nothing to do with hooray." Indeed,

> ...when any writer pretends that a pigeon makes him sad, or makes him anything else, I must instantly protest that this is a highly specialized fantastic impression created in an individual consciousness and that therefore it cannot fairly be presented as a simple description of what actually was to be seen.

He continues, "It is neither just nor accurate to connect the word alas with pigeons. Pigeons are definitely not alas...They never alas me, they never make me feel alas; they never make me feel anything…" He spends a few more pages forwarding his theory of pigeon nihilism, convincing readers that pigeons have and can elicit no feelings compared even to fish, even when decked out in ribbons, and so on, until the reason for the piece's title becomes clear at the end. He writes that if you sent "an owl into my room, dressed only in the feathers it was born with...I would pull the covers over my head and scream," yet

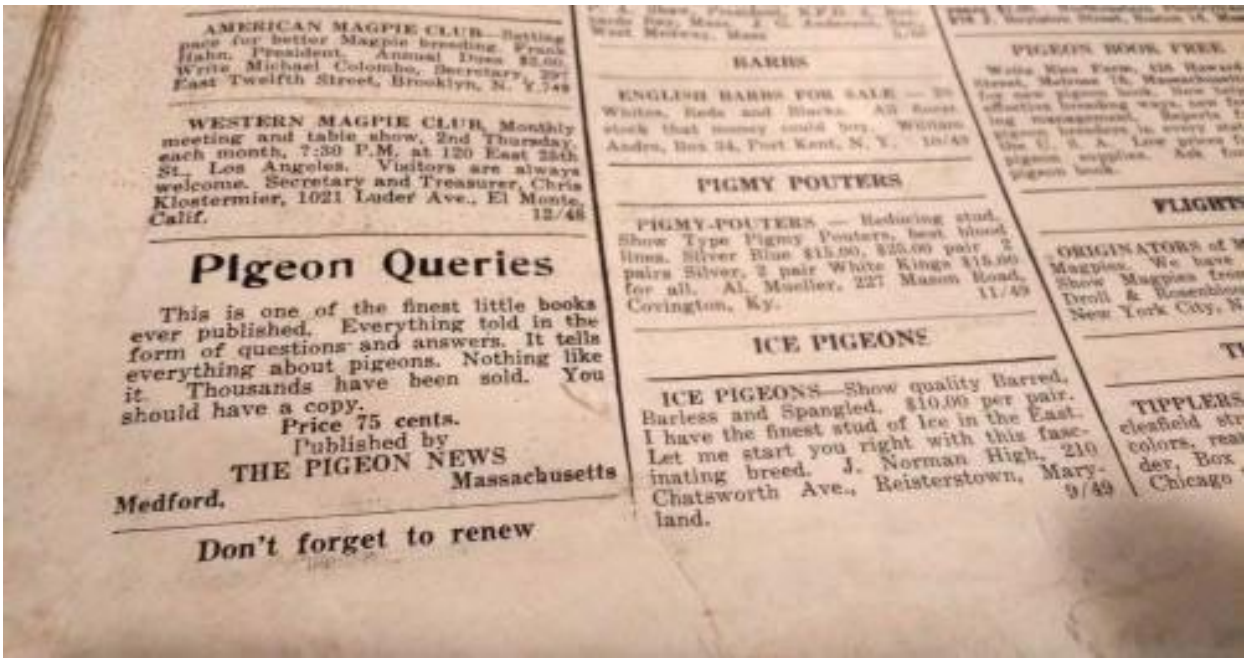
> There is nothing a pigeon could be...which could get into my consciousness like a fumbling hand in a bureau drawer and disarrange my mind or pull anything out of it. You could dress up a pigeon in a tiny suit of evening clothes and put a tiny silk hat on his head and a tiny gold-headed cane under his wing and send him walking into my room at night. It would make no impression on me…
> For all the pigeon nihilism, the climax conjures a rather charming picture-book image of

a dressed-up pigeon, and a reminder that children's books, too, are rife with pigeon imagery—

consider the *Don't Let the Pigeon Drive the Bus!* hit series by Mo Willems.[24] I want to linger still on the evocative mental image Thurber conveys, of how there is "nothing a pigeon could be which could get into my consciousness like a fumbling hand in a bureau drawer and disarrange my mind or pull anything out of it," as it calls us again to how discourses of furniture and images of furnishing a home seem unavoidable in all talk of pigeons. In this way, pigeons occupy the interiors of our rooms, in addition to roaming all our cities, and ought to ruffle folds in the drawers of our minds.

+ + +

Clipping



AMERICAN MAGPIE CLUB—Betting pace for better Magpie breeding. Frank Hahn, President. Annual Dues $2.00. Write Michael Colombo, Secretary, 297 East Twelfth Street, Brooklyn, N. Y. 7/49

WESTERN MAGPIE CLUB. Monthly meeting and table show, 2nd Thursday each month, 7:30 P.M. at 120 East 25th St., Los Angeles. Visitors are always welcome. Secretary and Treasurer, Chris Klostermier, 1021 Luder Ave., El Monte, Calif. 12/48

Pigeon Queries

This is one of the finest little books ever published. Everything told in the form of questions and answers. It tells everything about pigeons. Nothing like it. Thousands have been sold. You should have a copy.

Price 75 cents.

Published by

THE PIGEON NEWS

Massachusetts

Medford.

Don't forget to renew

BARBS

ENGLISH BARBS FOR SALE — 20 Whites, Reds and Blacks. All finest stock that money could buy. Write Andes, Box 34, Port Kent, N. Y. 10/49

PIGMY POUTERS

PIGMY-POUTERS — Reducing stud. Show Type Pigmy Pouters, best blood lines. Silver Blue $15.00, $25.00 pair 2 pairs Silver, 2 pair White Kings $15.00 for all. Al. Mueller, 227 Mason Road, Covington, Ky. 11/49

ICE PIGEONS

ICE PIGEONS—Show quality Barred, Barless and Spangled. $10.00 per pair. I have the finest stud of Ice in the East. Let me start you right with this fascinating breed. J. Norman High, 210 Chatsworth Ave., Reisterstown, Maryland. 9/49

PIGEON BOOK FREE.

ORIGINATORS of

TIPPLERS

Figure 4: News from the John Yodanis Collection (1919–1987)
Photograph taken in 2017 in the Heinz History Center, Detre Library & Archives

[24]Not to mention the spin-offs, such as "Don't Let the Pigeon Build a Border Wall!" on *McSweeney's Internet Tendency:* https://www.mcsweeneys.net/articles/dont-let-the-pigeon-build-a-border-wall

5.0 Corvid Jizz

Figure 5: Raven at the Tower of London
May 2019, personal photograph

~

Bad Egg, Bad Crow

Starling murmurations, geese skeins, and pigeon kits have led us to one of the final flocking phenomena of this project—the murder of crows. The venereal term "murder" likewise debuted in *The Book of Saint Albans* (1486), and while there is a dearth of reliable information on the logic behind this selection of venereal term (and of most others), there is at least somewhat reasonable speculation on why crows were endowed with such a macabre group name. As omnivorous scavengers, crows throughout history would congregate where corpses could be found—on battlefields, in cemeteries, and other places associated with death—and where they could feast on carrion remains and thrive en masse.

Like starlings, geese, and pigeons, crows are highly successful in urban areas and have capitalized on human-constructed spaces to flourish in the wild. Despite also being labeled as pestilent by many, their larger size, greater intellect, and ominous aura command more respect, fear, and even confusion among humans. As Lyanda Lynn Haupt found in her preliminary research for *Crow Planet* how many "non-bird people" had "disproportionately strong" opinions divided between those who loved and hated crows, but how "there is nearly always an air of respect...that few songbirds command" when their name is invoked (Haupt 20).

Crows belong to the larger avian family of corvids, a group made up of many species often referred to in colloquial conversation as simply the "crow" family. It's a generalization that generates confusion and controversy, as the corvid family includes the much-larger ravens, which technical crows are often mistaken for, and smaller and more colorful jays and magpies (Marzluff and Angell 2). Corvids are a populous family notorious among humans for their

impressive intellect, loud voices, imposing (even bullying) presences, and unpicky appetites (footnote: magpies, *pica pica,* thus share a Latin name with the human disorder for eating inedible substances, a topic I've explored in another project, "Readers, Digest: An Annotated Bibliophagy"). In the vocabulary of contemporary scientific classification, corvids are filed under the larger order of passerines—songbirds—and crows received their common name from the sound of their call.

George A. Kennedy, a scholar celebrated for his annotated translations of Aristotle and multivolume works on ancient rhetoric, is also responsible for one of the first articles on animal rhetoric. He writes in "A Hoot in the Dark" (1992), that since "Birds are the most vocal of all animals and vocal rhetoric is more highly developed among them than in any species except human beings," it is unsurprising that the ancient Greeks assigned "the name of Corax, or 'crow,' to the 'inventor' of rhetoric" (Kennedy 5). Indeed, the so-called founding of rhetoric by Corax of Syracuse is yet another widely-circulated origin lore featuring the quasi-biography of a notable historical protagonist, and this is readily acknowledged by rhetoricians today.

In "Who was Corax?", Thomas Cole explores how variations of the Corax origin story appeared in half a dozen texts from the 5th century A.D. to the 14th, but "If one looks for clear traces of the story in the millennium (roughly) between the time of Corax himself and that of his earliest biographers, the results are disappointingly meagre" (Cole 66). Nevertheless, Corax and Tisias are real figures in establishing the existing landscape of our discipline, regardless of whether or not they truly existed, and it is important for their stories to be told with the appropriate disclaimers.

The gist of the core tale is simple on the surface—Corax taught Tisias the art of persuasion expecting payment in return, so when Tisias refused to compensate Corax for his

education, the teacher took his student to court. Tisias "argued that if he won the dispute he need not pay, by that decision," but if he did not win the case, "payment would be unjust, since what he learned would be proved worthless" (Kennedy, *A New History of Classical Rhetoric* 34). Corax argued the reverse of his pupil, claiming an "unsuccessful prosecution would require payment" since it would only prove "the defendant had in fact been taught the art, just as per agreement" (Cole 65). The court dismissed the case and sent teacher and student away with the quip, "*Kakou korakos kakon oon,*" or "From a bad crow, a bad egg." Cole, in a parenthetical, again reminds us that this is "(a floating story of indeterminate origin eventually attached to Corax because 'Bad crow, bad egg' provided such an effective piece of closure)" (70).

In a 1940 article on "Tisias and Corax and the Invention of Rhetoric," D.A.G. Hinks traces different lineages of the story from fragments of the earliest sources to delineate "two traditions of the origin of Corax's rhetoric." One lineage, derived from this story, "given in substantially the same form by a number of authors," emphasizes that "Corax had been powerful at the court of Hiero, and devised his art as a means of maintaining that power in a republic," which means rhetoric was invented through "political oratory," drawing the "line of descent from Tisias to Gorgias," and so on (Hinks 62). The other begins with "Aristotle as quoted by Cicero," and renders Tisias and Corax as "theorists not in the political but in the forensic field," and he believes this "account is to be preferred; for it is notorious that the earliest systems of rhetoric were occupied entirely with the business of judicial oratory" (ibid).

Regardless of which lineage is emphasized or prioritized, sources all agree that Corax's (and by extension, Tisias's) extant contributions include an early classification system on "parts of the judicial speech" plus early controversial theories on the power of probability and plausibility in argumentation (Hinks 66). Kennedy corroborates this by adding, "Plato and

Aristotle are the only writers who might reasonably be assumed to refer to Tisias the Crow with some knowledge of what he taught," and they both "agree that what he taught was the use of argument from probability, or at least a certain form of argument from probability that could be used on opposite sides of the same case. They attribute nothing else to him" (34).

Cole notes, "Greek parents were not in the habit of calling their children crows" and thus it's "unlikely...Corax was anything but a name bestowed after—not before—its bearer had started to teach people how to speak," and the "epithet may have been totally derisive," as a way "to associate loud and frequent, or inept and unwelcome, discourse with the chatter of crows (81). Kennedy echoes that Corax "might be a nickname, derived from an impression of his tiresome 'cawing' in his speeches" (Kennedy 34). The cultural implications of the naming of Corax strike me as especially curious for many reasons—among them, it serves as a reminder of how essential a name is in the composition of a biography, of a life story. A name is often the starting point of a biography, and having multiple names, even if they turn out to refer to the same figure, allows space for multiple stories and inventions. Naming is an entirely-invented entryway to ownership, to control, and to mastery.

Recall again how rhetorician Star Medzerian Vanguri reminds readers of the omnipresence and critical importance of nomenclature: "Every day we move among names, interact with them, live in them, consume them" (1). Since giving something a name is often a subjective act, and "those who name are generally in positions of power," imaginative fictions, both intentional and not, are often incorporated in the act of naming (4). The act of naming can have powerful implications and effects linked to ideas and realities of identity, knowledge-making, ownership, and more, in myriad ways across diverse contexts.

In the context of ornithology, common and scientific names of birds often shift as various

species crossbreed to create hybrids and/or are recategorized through new methods of genetic research. These words are constantly shifting; they are alive and in flight. In his chapter on "Naming Matters" in *Birdscapes: Birds in Our Imagination and Experience* (2009), Jeremy Mynott invokes inventions of names from the angle of human agency: "Names are invented: they can be modified, changed, replaced, or abolished at our discretion" (232). He asks: "Are names ever more than just labels? Does it matter what name a bird has and can we say some names are 'better' or more 'real' than others? What criteria do we use to invent them?" (ibid). The act of naming is a powerful one, which can reinforce ideologies, disciplines, worldviews, and more—and as such, theories on the topic date back centuries.

~

"Just Wing It"

It was Debra Hawhee who initially directed me to the concept of *epea pteroenta,* or "winged words," in Homeric epics, during a Rhetoric Society of America workshop in which she responded to an early draft of my first dissertation chapter. In her book, *Rhetoric in Tooth and Claw: Animals, Language, Sensation*, Hawhee notes how "winged words" as a phrase "appears no fewer than 124 times in the *Iliad* and the *Odyssey,*" and its "meaning has received careful consideration from commentators and philologists over the past century and a half" (Hawhee 37). Hawhee references one main source by classicist Steve Reece, *Homer's Winged Words: The Evolution of Early Greek Epic Diction in Light of Oral Theory* (2009). I ordered this book after finishing my section on naming, and was simultaneously delighted and irked to discover it opened on three epigraphs about none else but the concept of naming. The first were lines from Plato's *Cratylus* and Shakespeare's *Romeo and Juliet* I had in my existing notes and older writings on onomastics, but the third was an especially wonderful surprise, and I am shocked I'd

overlooked it before—

> When I use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean—neither more nor less." "The question is," said Alice, "whether you can make words mean so many different things." "The question is," said Humpty Dumpty, "which is to be master—that's all. (Carroll qtd. in Reece 3).

Despite my longtime interests in names, oology, and Mother Goose, and the fact that I wrote my entire first project paper on onomastics in ornithological history, I had somehow neglected the moment from Lewis Carroll's *Through the Looking Glass* when egg-with-legs Humpty Dumpty attempted to convince Alice that all names must have meaning by announcing, "my name means the shape I am—and a good handsome shape it is, too. With a name like yours, you might be any shape, almost" (Carroll). Reece's chosen excerpt further reinforces the ineluctable connection between naming and mastery in its final lines, after which Alice sits in puzzlement after this moment, unsure of how to interpret the anthropomorphic egg's riddle. Humpty Dumpty goes on later to boast, "I can explain all the poems that were ever invented—and a good many that haven't been invented just yet" (Carroll).

Of poetry and winged words, there is a brief audio podcast narrated by classicist Casey Dué at the University of Houston on "Winged Words," which summons an image to illustrate its corresponding ideas. She begins, "The ancient Greeks actually thought of poetry as being in flight. One Bronze Age wall painting shows a bird emerging from a bard as the embodiment of his song." Dué recalls for readers the vehicle and nature of poetic delivery, and how these pieces contemporary readers encounter as texts were originally "composed orally, on the fly and in performance, as the poet spun myth to life." She attends, too, to the material language of weaving, with a gesture toward the etymology of "text" as rooted in the terms of texture and the textiles that were spun (Dué).

Reece writes that "etymology," if we follow the Greek roots of the word, "literally means

‘a study of what is true,’” and notes it was a study “many of the most learned and eccentric scholars of the Greek language...concerned themselves with” for over 2,500 years (Reece 4). In these centuries, one of “most productive source of difficult, even inexplicable, words was Homer’s 28,000 or so verses of epic poetry,” and it is with the etymological impossibility and meaning migrations of some of these words that Reece’s work contends with (ibid).

The main argument of Reece’s book is actually uncannily resonant with the *wabi sabi*-infused non-argument I introduced with the assistance of murmurations in my first chapter, but tailored to a very specific Homeric context in a far more disciplined way. He proposes that it is due to “oral transmission acoustic uncertainties,” and especially those regarding misarticulated/misheard “word boundaries,” due to the frequent difficulty of soundly deciphering where one word ends and the next begins in a live performance, that has led to “some of the etymologically inexplicable words and phrases that we find in our Homeric texts” (Reese 8-9). This is to say, if “a bard uttered one collocation of words, but his audience—which often, no doubt, included an aspiring bard—thought it heard another,” the hearer will be inclined “to reanalyze or resegment the words and phrases of a speaker,” in a way which “wields a detectable influence on the historical development of the lexicon of many languages” (8).

Furthermore, the bards following Homer were crafting their work from a messy model, given how often “Homer himself did not understand some of the proper names and traditional words and phrases that had been passed down to him, and on occasion he toyed with various meanings in a naive way that is now called ‘folk etymologizing.’” (4)).

All of this is to say Reece is in part arguing that the enduring power of Homer’s poetic language is *due to its imperfection* in the multisensory, multimodal process of circulation and composition. This thematically brings us full circle to that opening image of the murmuration of

starlings, and not just to the impossibility of mastery but how what might be perceived as pestilence in a culture constantly striving for mastery toward perfection might be reframed as the root of flawed and timeless poetry.

~

In literary contexts, the Homeric Question—that classic debate over the identity, or identities, of the legendary Homer—might be another logical place to begin an analysis of Western culture's invention-infused preoccupation with naming and biography. Indeed, most angles of Homer can be and have been examined with substantial depth, and it is perhaps not surprising how much of his legacy is still relevant when exploring animal materialities in the practice of composing today. Scenes of Penelope weaving and disassembling portions of her unfinished burial shroud in the *Odyssey* could readily be read through the discourses of gossamer craft and skeins in the previous chapter; the image of the woman laboriously weaving and re-weaving this literal and figurative web in a plot of dissimulation is eternally an evocative one. I thus want to remark briefly on the gossamer nature of Derridean dissimulation (motioning across chapters to the notion of spiders ballooning back and forth by the strength of silk across leaves and grass in open fields):

When Jacques Derrida theorizes in *Dissemination* (1972) on "Plato's Pharmacy" (Plato being another thinker practiced in fictionalized biography, if his dialogical depictions of Socrates are any indication), he homes in on an analysis of the term *pharmakon,* re-reading Plato's *Phaedrus* with careful attention to its many connotations. Derrida weaves his arguments in characteristically dense and circular prose, so the incorporation of enigmatic web imagery performs form, function, and further:

> "The dissimulation of the woven texture can in any case take centuries to undo its web: a web that envelops a web, undoing the web for centuries; reconstituting it too as an

> organism, indefinitely regenerating its own tissue behind the cutting trace, the decision of each reading" (Derrida 1697).

In the initial web presented, if text might be interpreted as the "woven texture," "the decision of each reading" allows for a fresh regenerative reconstitution, to play with his words. He tugs the reader back after another section, reiterating: "Let us begin again. Therefore the dissimulation of the woven texture can in any case take centuries to undo its web" (1699). He leads into more abstruse reflections by transitioning with simple "Let us…" suggestions: "Let us read this more closely" (1700),..."Let us freeze the scene…" (1706), "Let us return to the text of Plato" (1712).

Though on surface it serves as an open invitational phrase, with each "Let us…," Derrida pulls his reader to follow the formation of his arguments, and the phrase sticks in his reader's memory. Derrida is clearly in charge here, playing leading roles as reader and writer simultaneously. If my interpretation is correct (and I did not get too tangled up in his translated words), Derrida is addressing while performing the importance of such active readership—as "reading *is* writing" (1697)—by pinpointing the reader's agency and ability to deconstruct/reconstruct a piece of writing, and by taking advantage of all of a text's interpretive possibilities. Derrida notes that while pre-established webs might have been made to ensnare readers through centuries of pre-existing analyses, an empowered reader can take charge and take over to create something new—as he does with Plato's classic. The weaver of Derrida's "woven texture" can be reader/writer—any decision-making animal. It is from these images and ideas, however old-fashioned they may seem, that I want to flit back to "winged words."

~

Reece does not fully address the possible interpretations of his titular epithet until the final chapter of his book, called "Winged and Wingless Words." He positions *epea pteroenta* as

a phrase which occurs "after the penthemimeral caesura in all its one-hundred and twenty-four occurrences"—a pattern of appearance so consistent there are arguments "winged words" at some point "lost its semantic force and retained only a formal function," which is to announce that "direct speech by one of the characters within the epic was to follow" (this is Parry's argument as paraphrased by Reece). Reece is optimistic that "winged words" has retained robust metaphorical meanings, albeit uncertain ones. The most accepted argument is indeed that "winged words" is meant to signify "a 'winged' bird escaping through the 'barrier of the teeth' of the speaker, like a bird escaping from a cage, and flying swiftly to the receptive ears of the hearer" (318). This is supported in part by the "frequent association in Homer and other Greek poetry of human utterance (speaking, singing, weeping, shouting) with the sound of birds" (319).

Reece's arguments rely on closely reading many selections of Ancient Greek texts, which I am unfortunately unable to read in the original language myself. From here, instead, I set out to revisit another Ancient Greek writer who wrote on winged words: Aristophanes (c. 446–c. 386 B.C.). As fate would have it, the day I visited Pittsburgh's Squirrel Hill Library to cross-check English editions of Aristophanes' *The Birds,* I was greeted with a white board display announcing the day's events along with the quote: "By words the mind is winged," attributed to Aristophanes. I could not recall a moment in which this phrase emerged, and looked it up online. Reddit came to the rescue once again: one of my first Google results for the quote was a student query seeking assistance on an assignment to decipher its meaning.

The question generated several generous paragraphs of unacknowledged response by a Redditor evidently just waiting in wings for such a question. Redditor "Colonelsandersz" (whose username suggested wings of another sort) tells the student, "Your assignment is probably wrong." Highlighting portions of the original Greek text and linking to a digitized interactive

translation version of *The Birds* (http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0026%3Acard%3D1436),” Colonelsanderz suggests a more accurate translation would be "the mind is elevated by words and the man is lifted up.” Not ready to rest there, he goes above and beyond to contextualize the passage by translating an adjacent line: “Having raised you with feathers, I wish to nourish you to a legitimate task with useful/worthy/honest words” (*Reddit*).

~

This feels like the appropriate moment to pause and invoke that feisty utterance of “just wing it!” While anachronistic, it shares in the spirit of these interpretations. To “wing” something in this sloppy sense is to perform it extemporaneously, again, “on the fly.” This usage first appeared in theatrical lingo of the late nineteenth century, often referring to an underprepared understudy waiting in the wings, or the side areas of a stage, who glances back for cues from others in the wings when asked at last to step into the spotlight.

I like to think of “winging it” in relation to rhetorical history and the “bad crow, bad egg” legacy of Corax and Tisias, which is today at once fundamental to the development of a complex discipline and still denigrated as a tiring instance of early sophistry. It is perhaps not coincidental that everyday attitudes of laypeople toward the term “rhetoric” often align with this maligned mode in which a speaker treats facts as secondary to persuasive artistry. Persuasive artistry can be improvisational and extemporaneous in the “winging it” sense, but it can also be calculated and intricately wrought—with “winging” replaced by “wringing.” I like to think of the possibilities of persuasive artistry in terms of wordplay—there is often a ludic, sensational quality to it—and while the appropriate place and deployment of this playfulness in powerful rhetoric is endlessly debatable, there are other modes of language-work that embrace it

wholeheartedly—in poetry, and in performance, certainly.

Aristophanes was a writer who "condemned rhetoric on moral and political grounds" but delighted in poetic play[s], and thus celebrated for his comedic theatrical works. *The Birds* is his longest surviving comedy, first performed in 414 B.C, and happens to open on a scene with two men of advanced age (some translations specify middle-aged while others elderly) and their pet corvids. In every translation, the character Pithetaerus wields a pet crow, while Euelpides holds either a jay or a jackdaw. (In passages forthcoming, I quote from this anonymous online translation where not specified otherwise, where jackdaw is the preferred pet name: http://classics.mit.edu/Aristophanes/birds.html).

"Do you think I should walk straight for yon tree?" asks, Pithetaerus, sputtering at his crow, "Cursed beast, what are you croaking to me?...to retrace my steps?," and later, "What misfortune is ours! we strain every nerve to get to the crows, do everything we can to that end, and we cannot find our way!"

The two are on a quest to find "Tereus, the Epops, who is a bird, without being born of one"—a king who was metamorphosed into a hoopoe bird (possibly *Upupa epops*, possibly something else entirely; some suggest a lapwing). The corvids soon prove themselves useful, and guide themselves to Tereus's servant, the large-beaked Trochilus, who startles the group on appearance. It is in this moment of "Mutual terror between the bird and the two Travellers" when the "crow and jackdaw escape," never to be seen again.

~

In one intentionally airy transitional sweep on the subject of bird scarers, I want to segue here to consider the relationship between fear and corvids. Another form of reprehensible argumentation loosely linked through literal scarecrows is, after all, the so-called "straw man

fallacy." In this dishonest approach, a debater might distort and misrepresent the views of an opponent, and attack those twisted views while forwarding their own as correct by comparison, thus creating an illusion of winning the debate.

Scarecrows, which are often propped up as human forms stuffed with straw to scare birds from crops, have been fashioned in agricultural settings since ancient times. These straw men, like the logical fallacies that share their name, continue to be prevalent despite being comedically ineffective at the task they are designed to perform. Bird scaring technologies have taken many forms through the ages across the world—in the Victorian era, for one, this included actual human form, as young children were hired to use clackers to scare away the birds. In an image familiar to many students of literature, recall the plight of the boy protagonist early in Thomas Hardy's *Jude the Obscure* (1895), who was soon after punished for easing off on his duties:

> The boy stood under the rick before mentioned, and every few seconds used his clacker or rattle briskly. At each clack the rooks left off pecking, and rose and went away on their leisurely wings, burnished like tassets of mail, afterwards wheeling back and regarding him warily, and descending to feed at a more respectful distance. He sounded the clacker till his arm ached, and at length his heart grew sympathetic with the birds' thwarted desires (Hardy).

~

Another theatrical avian word which brings us back to the corvids at the center of this chapter is "staging." The term "staging" is one I often hear avian researchers and local birders use to refer to the activity of crows when they gather to stop and rest or roost together in a certain area; "the crows are staging by the bridge at Panther Hollow," for instance. I've found surprisingly little ornithological or etymological literature on why this is the preferred lingo, but the dramatic resonances of crows taking a stage feel appropriate, especially following up on the language of the wings of stages.

After all, it is due to the staging of crows that I often feel as if I've stepped into a

theatrical set when I leave the Cathedral of Learning each dusk beginning around Halloween then through the chill of winter months. For those of us who work at the University of Pittsburgh's main campus in Oakland, we have become accustomed each evening to being accosted by the mechanical yet menacing shrieks of predator birds repeated on loop and projected at great volume by expensive machines installed across campus for the sole purpose of scaring crows from staging on campus. We are met with a more impressive sight when we look up—to see thousands of crows continue to huddle in dormant trees against the darkening sky, undeterred by the efforts of the facilities management personnel tasked with cleaning up after them each day.

These migrating common American crows (*Corvus brachyrhynchos*) began staging regularly near campus quite serendipitously the year I began my graduate studies at Pitt in 2013. Local bird expert and blogger Kate St. John noted that this shift coincided with the demolition of a former favorite roosting spot at the Addison Terrance housing projects. In Pitt's first effort to shoo the birds in mid-November 2013, facilities personnel "positioned a loudspeaker on the low roof of the Student Union and played very loud bird distress calls over and over all night," and for five nights, the skies of Oakland were filled with the cries of "birds fighting and dying: a robin in awful distress, an unidentified bird screaming and a peregrine kakking" (St. John).

St. John first heard of this when was sent a recording by someone seeking an identification, and she admits, "Initially I was fooled and thought it was real, though it didn't make sense. Any bird suffering that much would have died after the first assault and the noise would not repeat." From repeated reports, it quickly became clear that the ruckus was a recording, and she reckoned if the crows were initially scared away at all, the recordings likely did not deserve full credit. Instead, it was the combination of the speakers with crows' sightings

of the actual predators—peregrine falcons—at the Cathedral of Learning. St. John was among the first to warn the campus facilities managers that the crows were "too smart to be fooled for long" (ibid). Certainly, these mechanized hoots seem to unsettle me and my fellow humans more than the birds they are meant to scare off.

"Each year they come," reports Kimberly Barlow three years later, in an article on how the "Annual Crow Stopover Makes Work for Facilities" in a 2016 *University Times.* She interviews Kate St. John for the piece, one of the go-to experts on the topic, who "equated the gathering to a huge winter beach vacation for the birds. Crow families come with teenagers and little ones in tow—the previous year's hatchlings help raise the next year's brood" (Barlow). With a lifespan of 10 to 20 years, these birds are also known for spreading knowledge across generations—including about favorite places to roost. Bird experts have tried to count the birds, but it's difficult—over 25,000 crows were counted across Pittsburgh in the Christmas Bird Count of 2015.

Amanda Reed of *The Pitt News* notes the first "crow-pocalype" of 2013 wasn't as dramatic as the subsequent ones, and by 2016, Pitt needed to order two additional sound systems to play more horned owl calls—the featured predator of choice was suggested by ornithologist Bob Mulvihill of the National Aviary, the other frequent expert consultant and commentator on Pitt's crow situation. Each unit cost $602, and must be moved around regularly to have any effect. In 2018, over five years since the initial installation of the first crow deterrent machine, the problem continues. CBS Pittsburgh reported then that Pitt had purchased five machines by then, and turned them on each day at 5pm as soon as the crows begin to appear (CBS). Mulvihill reminds citizens "not to fret," as the birds are not dangerous, and their visitation is temporary. Mulvihill says "the birds congregate in urban areas because they're surrounded by their feathered

friends, plentiful food, lots of artificial lighting and a plethora of buildings to keep them warm" (Mulvihill qtd. in Reed).

Each year the birds come, and each year the local press publishes a few more pieces about them, with titles along the lines of "Oakland Crows: A Big Mess but a Harmless Murder" (*Pittsburgh Magazine*). As journalist Kim Rooney writes, "their excrement can overnight turn the sidewalks along Forbes and Fifth Avenue near the student union into something resembling a Jackson Pollock painting." Rooney ends her piece by remarking that since the "nuisance" crows are such an active presence in the daily lives of students, perhaps the "seasonal flocks that fill the night sky might even inspire a rival to Edgar Allan Poe's famous poem."

~

"Fancy unto fancy, thinking what this ominous bird of yore— What this grim, ungainly, ghastly, gaunt, and ominous bird of yore Meant in croaking 'Nevermore.'" – Edgar Allan Poe, "The Raven"

The poem Rooney alludes to is, of course, "The Raven" (1845)—a poem featuring not a specimen of the *Corvus brachyrhynchos* so plentiful at Pitt but a *Corvus corax*, or common raven—meaning, yes, to make things more confusing, some have translated the credited founder of rhetoric's name to be "raven" instead of crow.

In the field, common ravens and crows both appear as medium-large black birds with heavy bills. Ravens are much larger than crows, but it can be difficult to assess size in the wild without immediate juxtaposition. Beyond weight and wingspan, the birds have different flight patterns: crows flap more than ravens, since ravens can soar more effectively without constant flapping. Crows have a "mainly straight, slightly rounded tail," whereas ravens have "wedge-shaped" tails (ibid). While "crows *caw* and purr" from their smaller beaks, "ravens croak and scream bloody murder" from larger, curvier beaks, under which there are more noticeable

bristles (BirdNote, *Audubon*). As Haupt reminds readers in *Crow Planet*, "there are many differences between the two species, and if we can train ourselves to move beyond our over-reliance on color in the identification of birds (as with most other things), it becomes clear that not all the differences are subtle ones" (Haupt 21). The charged racial language of blackness as connected to crows and ravens becomes even more explicit than the language marking the darkness and dirtiness of pigeons, but the similar persecutive connotations and consequences are perpetually problematic.

In addition to their reputations as ravenous scavengers who feast on corpses, it is precisely and predictably this inky coloration which has led these birds to be symbolically linked to insanity, death, and bad omens. Blackness is linked to the dark arts, to witchery, and to the devil. As Poe's raven repeatedly croaks "Nevermore" on loop that fateful "midnight dreary," the "weak and weary" narrator, mad with grief for his lost love Lenore, shouts at the talking bird, "Prophet!...thing of evil!—prophet still, if bird or devil!"

Poe's raven was likely inspired by another raven with a storied biography, who has played a pronounced role in my own literacy narrative: Charles Dickens' storied and now taxidermized pet, Grip the raven. In the immortalized words of the fictionalized Grip:

> ...'Halloa, halloa, halloa! What's the matter here! Keep up your spirits. Never say die. Bow wow wow. I'm a devil, I'm a devil, I'm a devil. Hurrah!'—And then, as if exulting in his infernal character, he began to whistle.
>
> 'I more than half believe he speaks the truth. Upon my word I do,' said Varden. 'Do you see how he looks at me, as if he knew what I was saying?'
>
> To which the bird, balancing himself on tiptoe, as it were, and moving his body up and down in a sort of grave dance, rejoined, 'I'm a devil, I'm a devil, I'm a devil,' and flapped his wings against his sides as if he were bursting with laughter. Barnaby clapped his hands, and fairly rolled upon the ground in an ecstasy of delight.
>
> 'Strange companions, sir,' said the locksmith, shaking his head, and looking from one to the other. 'The bird has all the wit.'

With these squawked greeting and repeated proclamation of "I'm a devil," the fictional Grip loudly and memorably enters the scene in the sixth chapter of Charles Dickens' *Barnaby Rudge: A Tale of the Riots of 'Eighty* (1841). He appears throughout, and though what he cackles is memorized mimicry, the bird nevertheless appears knowledgeable next to his master, the dim Barnaby. Appearing as an "infernal character," Dickens reinforces the hellish discourse surrounding ravens established by the Western literary tradition—the refrain appears multiple times, here in chapter forty-seven:

> 'Grip, Grip, Grip—Grip the clever, Grip the wicked, Grip the knowing—Grip, Grip, Grip,' cried the raven, whom Barnaby had shut up on the approach of this stern personage. 'I'm a devil I'm a devil I'm a devil…'

There is not much one has to say for the character of Grip — the chatty Grip chants it all himself, over and over again. The constant repetition is comic and uncanny, and the words and quirks of the lively bird lend energy to each scene he appears in. Dickens' absolute affection and close observation of ravens in real life appear in his portrayal of the fictional bird, which was based at least partially on the original real-life Grip.

Of all the places Dickens could have opened the first edition of *Barnaby Rudge,* he chose to begin his preface with "Mr. Waterton having, some time ago, expressed his opinion that ravens are gradually becoming extinct in England, I offered the few following words about my experience of these birds." In the 1858 reissue of the novel, he revises the first sentence to say, "As it is Mr. Waterton's opinion that ravens are gradually becoming extinct in England, I offer a few words here about mine."

In both editions, Dickens' "few words" include tales of the lives of the two ravens—his first and third (the second was unimpressive)—which he fused to formulate the fictional pet of the eponymous title character. It is after addressing the death of his third raven ("Since then I

have been raven-less") that Dickens transitions to address the larger historical situation of *Barnaby Rudge:*

> No account of the Gordon Riots having been to my knowledge introduced into any Work of Fiction, and the subject presenting very extraordinary and remarkable features, I was led to project this Tale.

Ravens often took precedence in Dickens' letters to his friends (in particular, to artist Daniel Maclise, who occasionally sketched Grip). He often went on about the brilliance and daring of the original Grip with pride. In the *Barnaby Rudge* preface, Dickens bragged about how the raven slept on horseback and so terrified the dog "by his preternatural sagacity, that he has been known, by the mere superiority of his genius, to walk off unmolested with the dog's dinner, from before his face." After the first Grip was poisoned by unsuspectingly eating paint chips, he was taxidermized, and Dickens was gifted a second raven of "comparatively weak intellects," on which little is written about (House 304). This unfortunate creature was overshadowed not only by the taxidermied Grip, which shared Dickens with him, but also a talented third and final raven, about which Dickens exclaimed:

> Some friends in Yorkshire have sent me a raven, before whom *the* Raven (the dead one) sinks into insignificance. He can say anything—and he has a power of swallowing door-keys and reproducing them at pleasure, which fills all beholders with mingled sensations of horror and satisfaction — if I may [say] so; with a kind of awful delight (Dickens qtd. in House 412).

In thanks for this gift, Dickens wrote to Charles Smithson on December 20, 1841,

> I seem to remember, too, that you paid for THE Raven—Good God!—if only you could hear him talk and see him break the windows!...I can only hint at his perfections—that he disturbs the church service, and that his life is threatened by the Beadle. Maclise *knows* he can read and write. I quite believe it... (House 449).

The more human traits the bird exhibited, the more terrifying he became—and the more Dickens embraced it. In another letter, he raved that the bird was "a wonder, a paragon," exclaiming to the recipient that "I could tell you such things of him, as would make your hair stand on end."

Dickens is particularly delighted by the bird's delight in drunken men; he claims the raven "loves to see the human Nature in a state of degradation, and to have the superiority of Ravens asserted. At such time he is fearful in his Mephistophelean humor" (House 438).

~

The taxidermied remains of Grip now sit in the same room as the only extant manuscript copy of Edgar Allan Poe's "The Raven" (1845)—I am sitting mere miles from the collection as I write this today, sitting in the promixity of the Philadelphia Free Library, where Poe enthusiast Colonel Richard Gimbel donated his collection in 1971.

In March of 1842, almost exactly one year after the publication of *Barnaby Rudge* and the death of the original Grip, Dickens took his first tour of the United States, to lecture on international copyright law. Poe requested to meet up with him, and according to some accounts, they met to discuss the state of American poetry. No primary documents remain from this meeting, though a few letters exist in the correspondence of the two authors, which fell apart mere months later. Poe supposedly became offended after Dickens neglected to introduce him to his publisher, as he had hoped—and Dickens referred to Poe as an "unknown author," further angering him (extended discussions of this can be found in Gerald G. Grubb's "The Personal and Literary Relationships of Dickens and Poe" and others).

Poe's landmark poem, "The Raven," was published in 1845—and his accompanying essay on the process of writing it, "The Philosophy of Composition," in 1850. The opening lines of the essay quote a letter from Dickens:

> CHARLES DICKENS, in a note now lying before me, alluding to an examination I once made of the mechanism of "Barnaby Rudge," says- "By the way, are you aware that Godwin wrote his 'Caleb Williams' backwards? He first involved his hero in a web of difficulties, forming the second volume, and then, for the first, cast about him for some mode of accounting for what had been done.

Despite whatever residual resentment, Poe was willing to broadcast his associations with the famed Victorian novelist. *His* literary raven—every bit as haunting—would be remembered for the echoes of its memorable refrain, "Quoth the Raven, Nevermore." This was something he was extremely deliberate about, and aware of, as seen in his commentary:

> I had now gone so far as the conception of a Raven, the bird of ill-omen, monotonously repeating the one word "Nevermore" at the conclusion of each stanza in a poem of melancholy tone, and in length about one hundred lines.

With the author articulating his intentions and methods, it is possible to gaze upon the product and follow along, to admire the detail and depth of craft. Allowing the author to deconstruct the work arguably makes the reading of it less of an interactive experience, and more an experience of simply looking, observing, taking in, and learning from the source itself—if we trust the writer, that is.

~

I was a writer who stumbled into avian studies through the more traditional realm of literary studies—specifically, I found my way to writing about birds while brainstorming final paper ideas with Professor Christopher Benfey at Mount Holyoke College during his seminar on "Literary Biography." We had read Virginia Woolf's *Flush*, that wonderful quasi-biography of Elizabeth Barrett Browning's dog, and as someone who grew up with birds, I wondered what authors wrote about their avian companions. Professor Benfey suggested Flaubert's parrot, which was already the subject of that incredible Julian Barnes' book, and had a vague memory of Charles Dickens and a bird. This raven became the subject of an experimental essay on "Thirteen Ways of Looking at Grip the Raven," which became my graduate school application writing sample, and then one of my first publications (and then a piece of this dissertation).

I have spent a lot of my life studying ravens and can recite to you a list of facts believed

about this particular raven. I have traveled to Philadelphia to visit the taxidermied remains of Grip the raven in person, and scour all the archival relics collected in his name. I recently flew to England to spend a day with the legendary ravens at the Tower of London, at least one of whom has been named Grip in honor of the original. I sat by the raven enclosure for perhaps an hour, eavesdropping on all the tour guides leading their groups in, hearing the murmurs of the crowd as variation after variation of the rumored legend that the empire would fall if the ravens ever left the tower was recapitulated and reiterated…

Yet, to this day, for all the hours I've spent with raven materials, I still cannot confidently identify a raven in the wild without without a smaller crow present beside it for context. Without doubt, one of the most difficult skills I have tried to learn over the last half-decade of dissertation research has been the skill of birdwatching, and by extension once again, the constant contention with the limits of one's expertise in one's lifetime.

I want to pivot here again to folk etymology, a concept conjured earlier in Reece's line about how Homer's lack of expertise was a productive poetic force. In the many drafts I've written of my Grip project, one line has endured as the one that gets me the most double-takes from readers: "The jizz of Grip is eminently Victorian—and one might expect no less, as Grip is the late, great Charles Dickens' once-beloved pet and muse." This leads us to this chapter's final case study, drawn from a forthcoming publication I have on the topic despite being a resolute non-expert in the practice: the folk etymology of "jizz." I will begin by relating it to a more familiar concept to teachers of literacy and literature: "gist."

~

The Gist of Jizz

In a chapter on "Reading Comprehension" in *Technical Communication: Principles and*

Practice, textbook authors Meenakshi Raman and Sangeeta Sharma dedicate a section to describing the idea of "Understanding the Gist" of a passage on first glance. They explain, "When you try to get the general meaning from a text without concentrating on the individual words, you are reading for gist," and "when you read a passage, if you are able to understand its core meaning or main theme, you have understood the 'gist'" (Raman and Sharma 232). Raman and Sharma offer examples and possible explanations "for this ability or inability to understand the gist at first reading," noting that prior knowledge and context can play an impact, before attempting to explain *how* to read in order to understand gist. They begin with a consideration of form and structure, asking readers to consider and deconstruct the paragraph as an object with "one main idea and various details to substantiate that idea." There is a lot of care put into this pedagogical exercise, but also quite a lot of inescapable generalization. Reading for gist, they say, requires an ability to glean a main idea, as well as the "subordinate ideas and also the relationship between the ideas and the supporting details." The writers helpfully suggest that "You can do this by posing questions…" (ibid). Reading for gist, then, becomes an analytical and inquiry-driven exercise.

This idea of understanding the gist of something parallels quite directly a concept in the world of birdwatching—the idea of understanding the "jizz" of a bird—this may or may not be coincidental, and in fact, the two terms are often brought up alongside each other, if not used with fluid interchangeability.

~

The noun "gist" is defined differently in four separate entries in the *Oxford English Dictionary;* three of these entries mark obsolete usages of the word, some with overlapping and interlocking elements. The first entry implicates the avian world by noting that "gist" denotes

"stopping-place or lodging," sometimes "said of birds and their halting-places." The second definition is preceded by a question mark: "? Refreshment." A related obsolete entry specifically refers to the "right of pasture or 'feed' for cattle by payment or otherwise" (*OED).* Each of these involve creatures pausing for refreshment.

The third noun definition is the one used by Raman and Sharma, and comes from legal language: "1. Law. The real ground or point (of an action, indictment, etc.)." Part two of this entry applies it to more general contexts as the "substance or pith of a matter, the essence or main part."

Each variation of "gist" appears to be rooted in the Old French *giste,* related to *gésir,* or "to lie [down]," and sometimes in the sense of "*gésir en,*" or "to consist in, depend on" (OED). The potentially related term "jizz" is significantly messier than "gist." *The New Partridge Dictionary of Slang and Unconventional English* offers two definitions for the seven spelling variants of "jizz; jizzum; jism; jiz; jizm; gism; gizzum" (1107). The first is a noun, a synonym for semen, coming out of the United States in 1941. The verb form, "to ejaculate," was first used in 1983. Each definition is accompanied here by a sexually explicit list of usage examples ranging from 1957 to 2001. The most compelling element of this singular entry is a note following the first noun definition saying the word, "Links to an earlier use as 'life-force, energy, spirit'; a meaning that, occasionally, may still be intended" (ibid).

This connotation potentially offers the most fertile link between two otherwise disparate uses of "jizz." The lesser known definition is surprisingly the only one offered by the *Oxford English Dictionary:* "the characteristic impression given by an animal or plant." This second definition, while less common, preceded the slang variation, and is primarily used among birdwatchers and naturalists as a fast method of field identification, sometimes associated and

used interchangeably with the variably-transcribed concept of "GISS," or the "General Impression of Shape and Size" of a bird.

Provided with the suggestion of the "life-force, energy, spirit" of semen in the slang dictionary, however, we are reminded that the term most obviously resides in its literal reproductive power. Still, I wonder: could the abstract set of features which leads to the identification of a figure be considered, in an abstract sense, as having a "life-force, energy, spirit"? Although it may never be entirely proven whether the birding usage of "jizz" is linked to "jizz" as vulgar slang, this connection convinces me that "jizz" is a single polysemic entity, as opposed to unrelated homonyms merely overlapping in orthographic form.

Linguistic evidence suggests the two semantic identities of jizz might be simultaneously inhabitable and etymologically interchangeable, yet all lineage is uncertain. Legend and literature have accused "jizz" of being a polysemic bastardization of an acronym, a backronym, and any one of a line-up of possible parent words. The extent to which jizz is a messy, fluid, and somewhat opaque term, linked to embodied knowledge, and generative across diverse contexts, renders this odd term ripe for generating a full-bodied rhetorical investigation.

While the *Oxford English Dictionary* never mentions the sexual slang definition of "jizz," it is an exception in this regard; other reliable sources, including the *Merriam-Webster Dictionary*, consistently define "jizz" as slang derived from "jism" and "gism," dropping the birding connection instead. This difference might be attributed to variations between common usage in British versus American English; Scott Wood's review of Peter Weaver's *The Birdwatcher's Dictionary* (1983) supports this, calling the volume "heavily slanted toward a British audience," with "many of the terms (e.g., jizz, carr, skerry, roding)…rarely heard in the United States" (Wood).

Furthermore, the earliest mention of jizz listed in the *OED* comes from English naturalist T.A. Coward's *Bird Haunts and Nature Memories.* Published in 1922, Coward's discussion of birding jizz predates any mention of sexual jizz by nearly two decades. The first quotation comes from a chapter simply entitled "Jizz":

> A West Coast Irishman was familiar with the wild creatures which dwelt on or visited his rocks and shores; at a glance he could name them, usually correctly, but if asked how he knew them would reply 'By their "jizz".' What is jizz?...We have not coined it, but how wide its use in Ireland is we cannot say…Jizz may be applied to or possessed by any animate and some inanimate objects, yet we cannot clearly define it. A single character may supply it, or it may be the combination of many.

Many naturalists "credit Coward with inventing the term, though Coward's passage clearly indicates he did not. Coward credits his own source, the Irishman, as claiming, "We have not coined it…" Regardless of origin, it is true that "jizz" has been a productive word, which "may be applied to or possessed by any animate and some inanimate objects." The final usage example in the *OED* cites a 1996 text by D. McClintock who refers only to plants: "I know only too well the problem of trying to express what there is in a plant that enables me, or you, to tell it from another at sight. The word I use for these intangible characteristics, that defy being put into words, is jizz" (*OED).*

From a functional perspective, "jizz" and "gist" hold similar use value as a way to gesture to the general impression of a thing. Can we identify birds by gist and books by jizz? Indulge me in this line of thought—just as you can read a passage for its "gist," you can also identify the "jizz" of a written artifact. Say a lay reader encounters a page of fragmented lines and conjectures, "it has the jizz of a poem." A skilled reader could be more specific—maybe it has the jizz of a sonnet, or even more precisely, a Shakespearean sonnet. If the amateur reader acquired a textbook, a field guide to poems, they could also solve the mystery, but once that book is consulted, the activity is no longer authentically analogous to "birding by feel."

The specificity of a "gist" and "jizz" reading and identification alike depends on the skill level of the reader—on expertise, on levels of mastery. Jizz is a messy, fluid, somewhat opaque, linked to a fleeting implementation of embodied knowledge, and incredibly generative across diverse contexts. Its specific insistence on dwelling in spaces of impossible mastery and attempted expertise(s) make "jizz" and "gist" both consistent concepts to consider in the context of this dissertation.

The myriad connotations and denotations of the "jizz" open up a provocative playing field for scholars curious about the strangeness, power, and fluidity of language and its movement. With this in mind, how is "jizz" useful in literary, rhetorical, and related interdisciplinary studies, and what might humanities scholars offer to "jizz"? What are productive ways to further tackle and tinker with "jizz," and, speaking from the position of someone embedded in a composition program, how might it be used in the writing classroom? On a metaphorical level, how might "jizz" be a generative figure?

Many elements on "jizz" are unknowable, which accounts for much of its appeal. Although the etymology of "jizz" is marked as unknown in the *OED*, a smaller text under the definition notes, "GUISE *n.* 5 is coincident in sense but the phonetic relationship remains unexplained and the two words may therefore be unrelated." Thus, even the *OED*, a source considered to be "the definitive record of the English language," can only speculate on the root of jizz. Peter Weaver's "jizz" in *The Birdwatcher's Dictionary* (1983) gives more detail than the *OED*, and is a useful elaboration despite its contested attribution to the inventor:

> The overall impression which a bird gives an observer, enabling an experienced birdwatcher at least to suspect its identity, even if plumage details and other diagnostic features cannot be seen. Jizz consists of a combination of colour, size, shape and movement. The word was invented by the Chesire ornithologist T.A. Coward (65).

Weaver's project is useful as an introduction to "Birdwatchers' language," which itself

involves expressions featuring "a mixture of science and slang" in a way which makes "discovering their precise meanings…remarkably difficult" (5). Weaver's contribution aims to remedy this, filling a gap he credits to an increasing global popularity of birding. He believes "there is more than ever a need for a book about birds and words," but is apologetic about the "unavoidably…subjective" selection of his terms (ibid). His critics are nevertheless harsh. One claims, "the definitions of words having more complex meanings are so short as to be uninformative, misleading or even incorrect," and "there are far too many errors, aside from the inaccuracies, in the words with which I am familiar with for me to trust even the simple definitions of those words new to me" (Wood)—scathing feedback for a dictionary.

Beyond dictionaries, there are a number of popular informal crowdsourced materials and outlier definitions to mention. The notorious Urban Dictionary website contains seventy-one user-generated entries on "jizz" across eleven pages, sorted by user-voted popularity. The majority involves irreverent variations on semen semantics, while birding is featured in exactly two brief entries. There are several outlier entries, too; the most unexpected meaning explains that "jizz" is an upbeat genre of music featured in *Star Wars*.[25] Even the outlier is grounded, albeit in casual sources. A 2014 BuzzFeed article on "A Brief History Of *Star Wars* And 'Jizz'" reports, "Jizz is an integral part of most everyone's *Star Wars* experience. And yet despite the fact that jizz is everywhere, not much is known about jizz" (Bernstein and and Warzel). This apt second sentence is surprisingly transferable, echoing my own sentiment regarding every other use of the word today.

---

[25] I don't cite from these, but Wikipedia's "Jizz (birding)" entry is strong for crowdsourced information: https://en.wikipedia.org/wiki/Jizz_(birding) and Urban Dictionary can be perused at your own risk: http://www.urbandictionary.com/define.php?term=jizz. On Star Wars: http://starwars.wikia.com/wiki/Jizz and http://www.buzzfeed.com/josephbernstein/a-brief-history-of-star-wars-and-jizz.

Although "jizz" is a controversial term among birders for myriad reasons, little (if any) of this controversy is generated by the term's popular American definition. When the alternative use emerges in bird-centric forums, birders tend to acknowledge the non-bird function in good humor. For example, celebrity bird-blogger and beekeeper Sharon Stiteler aka "Birdchick" penned a 2005 post anticipating fellow birder Pete Dunne's field guide, in which he was "going to describe the birds individually based on his personal experiences with the birds and their 'jizz'" (Stiteler). She follows up with a parenthetical "(Note to all of us under 40—jizz in birding terms doesn't mean what we thought it meant in high school. In birding terms it means the over all [sic] feel of the bird, so quit your snickering when you hear a 73 year old birder say, 'Well, the jizz of that bird makes me say loggerhead shrike.')" (ibid).

In this aside, Stiteler deems "jizz" a term more popular among an older generation of birders, which younger readers might find amusing—attributing dissonance to differences in age-based discourse groups, as opposed to cultural difference between American and British English. She imagines it *is* safe to assume the "jizz" familiar to the average 21st century reader is the slang iteration synonymous with semen and the act of male ejaculation. Her casual snark is characteristic, and especially appropriate for her egalitarian choice of blog as medium, with its potential to reach broad audiences. Either way, her attribution of the term to an "older generation" in 2005 stands in contrast with authors Kevin Karlson and Dale A. Rosselet's assumption a decade later that "jizz" will be a familiar term to all birders reading their field guide, *Birding by Impression: A Different Approach to Knowing and Identifying Birds* (2015), unless, of course, they are primarily targeting an audience of older birders.

In this guide, Karlson and Rosselet launch a new method of "Birding by Impression." Called BBI for short, their program builds on "the familiar GISS—general impression, size,

shape—style of bird identification" (Karlson and Rosselet 3). Both BBI and GISS birders practice "intuitive recognition of birds by unpremeditated absorption of their features," but BBI is a system birders can follow to develop skills gradually. GISS birding, by contrast, is often described as an instinctive practice among those who have previously attained the necessary skills to recognize species adeptly.

Their decision to transcribe the term *as* "GISS" instead of "jizz" is compelling, and it is curious they include with without any discussion. Among English-speaking birders acquainted with the birding term, many disagree on how it should be represented. Some refer to the concept signified by "GISS" as "GIS" birding, and others as "giss" or "gizz" among other lower-case variations. The concept, however, is less controversial, despite being surprisingly abstract. "Often considered 'birding by feel,'" blogger Nate Swift writes, for example, "it's difficult for a giss birder to even explain why a bird is identified as such because to them, a bird just feels right, and there you go" (Swift). This idea that "a bird just feels right" requires affective attunement and embodied knowledge from accumulated experience, and is difficult to be taught.

This may be why Karlson and Rosselet try to break jizz down to its learnable components—but it is notable how the opening gestures suggest the authors expect their 21st century audience of bird hobbyists will find jizz to be a "familiar" concept; they assume their readers belong to a discourse community already schooled in birding language. The latter assumption is arguably logical given the book's subtitle, *A Different Approach to Knowing and Identifying Birds,* which implies readers may have engaged previously with another, more familiar, approach. Still, such suggestion of experience is notable for a text in the educational field guide genre, which generally aims to aid amateurs and enthusiasts alike with identification of natural world entities.

From Karlson and Rosselet's belief that jizz (or GISS) birding is based on "intuitive recognition of birds by unpremeditated absorption of their features" to the idea of jizz being a collection of "intangible characteristics," there is a lot of room for maneuverability (Karlson and Rosselet 3; *OED*). Jizz is an intriguing and slippery term to attempt to define in part because it is a term used to define a range of things, and it is not so much "intangible" as difficult to articulate in an isolated way. Working with jizz means using an overall subjective experience to enable a potentially objective identification of a plant, animal, or thing. Between "intangible," "intuitive," and "unpremeditated absorption," navigating discourses surrounding jizz calls for interpretations of what appears to require an intricate, interwoven set of embodied skills.

Across hobbyist and scholarly texts, Jizz is often linked to both pleasure and expertise. In "Jizz and the Joy of Pattern Recognition" (2011), Rebecca Ellis recounts the performative jizzing contests of UK naturalists, which wonderfully showcase the strange, sticky relationships between jizz, competition, and expertise. Ellis notes these naturalists use the word "not only as a noun…but also as a verb for a particular observational skill—the ability to *jizz"* (770). She describes and interprets the trend of "speed identification" among competitive UK naturalists, who gather and "arrange for a friend to drive as fast as legally possible in the inside lane of the motorway, while [their] passengers shout out species names along the way," via jizz perception (770).

These games reveal a "tongue-in-cheek display of a particular kind of prowess; of a capacity for flash pattern recognition" and demonstrate unquestionable expertise; "the ability to identify plant species whilst driving at speeds of up to 70 miles per hour has become a recognizable sign of an expert" (ibid). Ellis notes the importance of being able to identify species by jizz in terms of building a "community of practice" and authority in the field: "Learning how

to see, and eventually seeing well, is the principal way naturalists define their sense of allegiance and belonging to the naturalist community" (771). This playful competition affirms the existence of a "community of practice," and jizz-based performances of expertise manifest across different disciplines.

Ellis defines jizz as "a tacit and embodied way of seeing that instantaneously reveals the identity of a species, relying upon but simultaneously suspending the arduous and meticulous study of an organism's diagnostic characteristics" (Ellis 769). She repeats Coward's passage, adding, "As a rule it is defined by character rather than characteristics, the tout ensemble of the subject…Perhaps the outdoor naturalist, and in particular the field ornithologist, realizes the full value of *jizz* better than most people" (ibid).

~

Pennsylvania-based naturalist and Pulitzer Prize finalist nonfiction writer Scott Weidensaul muses, "My wife and I own a lot of bird books…most birders are also bird-book collectors. And like most birders, we have a particular weakness for birding field guides…" (187). A more straightforward, and immediately conceivable, place to think through the concordant relevance of "jizz" and "gist" simultaneously within English studies is perhaps through field guides, the books of birders. Writing scholar Spencer Schaffner published *Binocular Vision: The Politics of Representation in Birdwatching Field Guides* in 2011, an original monograph that begins to open up the realm of field guides to rhetorical analysis.

He takes on birding field guides as "hybrid texts, existing at a textual crossroads between descriptive nature writing and the visual and textual rhetoric of science" (5). Schaffner writes, "Field guides make claims about the natural world through image, text, document design, and other content elements…and through the relationships between these various parts. Because of

this textual hybridity, and because field guides are positioned as reference materials, they have not typically been thought of as environmental literature" (5). As a marginalized subset of literature often used for pedagogical purposes by a mixed audience of amateurs and professionals, they occupy a curious textual space.

Schaffner continues, "The scientific leanings of field guides may make them seem authoritative, but that authority is no less constructed or questionable than the literary aspects of the texts" (7). He mentions Michael Lynch and John Law's "Pictures, Texts, and Objects: The Literary Language Game of Bird-watching" (1999) as an example of this, which likens:

> …identifying birds with a field guide…to a kind of Wittgensteinian language game, with users matching what they see in the 'real world' with various modalities of representation featured in the guide. The kind of taxonomically minded textual games that field guides are part of heightens their authority, to one extent, positioning them at one vital center of birdwatching (8).

Much of his book tackles cultural constructions underlying a range of guides, including the dangerous anthropomorphism of birds in texts which are supposed to be science-based authoritative, objective texts. His provocative close readings of historical, contemporary, traditional, and experimental guides illuminate plentiful future possibilities for analyzing the field guide genre.

~

Ravenous

I want to return to that obsolete definition of "gist" as related to refreshment and nourishment to segue into the etymology of "ravenous." In many ways, this entire project is my way of working through an academic craving. I've sought to forage, consume, and digest as many bird-linked terms as possible, and attempt to illuminate how these concepts have sometimes invisibly nourished and helped construct the worlds and works of human rhetorics, in

everyday composition and great literature alike. In doing so, I hope to reinforce and reinvigorate the necessity for continued attention to and care for all elements of the natural world. As a term, "ravenous" seemed a terrific tether for many of these topics—its first definition in the *OED:* "Originally: (of an animal) given to seizing other animals as prey; predatory; ferocious. Later: (of an animal or person; also of the appetite, hunger, etc.) voracious, gluttonous." There is likely no animal more literally ravenous than the human animal in each of these senses. We are "given to seizing other animals," and so "predatory" and "gluttonous" that we are driving others to extinction and causing daily mass destruction to the environment, and yet we attached the label onto non-human animals before figuratively reclaiming it for ourselves.

When I first began drafting this chapter, I therefore intended to orient the essay around the term "ravenous." I assumed, based on what I am inclined to call the jizz of the word, that the "raven" segment must be linked to avian origins. After all, the raven is a scavenging bird reputed to eat just about anything, and as mentioned early, in the scientific family as the magpie, whose Latin name, *Pica pica*, has even been transferred to name a disorder where sufferers crave and consume technically inedible substances, such as paper or clay. The onomastic reputation of corvids is connected to cravings in a way that makes a connection to "ravenous" seem beyond doubt. Of course, cross-checking reliable etymological resources complicated rather than confirmed this connection. For every term with a predictable origin, there is another with the sort (or set) of origin(s) that makes you do a double-take.

The *Online Etymology Dictionary* dates the adjective "ravenous" to a late 14th century emergence, defined as "obsessed with plundering, extremely greedy," coming from the Old French *ravinos*, of "rapacious, violent" people, and of "swift-flowing" water, from *raviner* "to seize," and from *ravine* "violent rush, robbery" (with a link to see "ravine"). The later meaning

of “ravenous” as “voracious, very hungry” arose in the early 15c. Selecting the linked “ravine” led to the Latin *rapina,* from "act of robbery, plundering.” Cross-checks led from this to the Latin *rapere,* "seize, carry off by force, abduct,” related to both the surging carriage of “rapids” and the violence of “rape,” and a more obsolete word: “ravening,” and the verb to “raven.” The *Online Etymology Dictionary* entry for “ravening” claims it dates back to the 1520s, means “voracious,” and is a “present-participle adjective from an extinct verb *raven,* meaning "to prey, to plunder, devour greedily...from Old French raviner (see *ravenous*).” Rather remarkably, and I want to believe questionably, the brief entry ends: “It is not etymologically related to raven (n.).”

The second definition of “ravenous” in the *OED,* “Given to plundering, or taking things by force; extremely rapacious,” is also followed by a brief note to compare this with the rare verb “raven,” derived from “ravin”: “Originally: to rage *with* hunger. Later without construction: to be extremely or intensely hungry; to be ravenous. Also *figurative*.” The raven bird is not mentioned at all in this entry.

The *OED* entry dedicated to the raven bird is much longer, with a more extensive etymology (though in short, the word is “inherited from the German”), and the first definition is:

> A large black crow, *Corvus corax* (family Corvidae), widely distributed in the northern hemisphere, feeding chiefly on carrion and having a deep croaking call. Later also (usually with distinguishing word): any of several other large, mostly black, birds of the genus *Corvus*.

In smaller text underneath the first definition:

> The raven has been regarded as a symbol of providence, in allusion to the ravens which fed Elijah (1 Kings 17:6), but more commonly as a bird of ill omen, foreboding death, from the habit of ravens of following armies in the expectation of feeding on dead bodies. There are a variety of variations moving from here, some rare, such as the similative

sense, “Any of various other birds (real or imagined) that resemble the raven,” and a figurative synonym to a “croaker” as “A person who brings bad or unwelcome news, or makes gloomy

predictions." Related figures derived from and compounded with the term include "raven-stone" as "a place of execution," and "raven's book" as an Irish English "list of the dead, or of those fated to die soon." Of material relevance, there is "raven's bill" as "any of various weapons and tools having the head resembling the bill of a raven," apt given that corvids have indeed been shown in scientific experiments to fashion tools to problem-solve when presented with the opportunities to do so.

The entry for "crow" is similarly extensive, with the first definition presented as:

> A bird of the genus *Corvus*; in England commonly applied to the Carrion Crow (*Corvus Corone*), 'a large black bird that feeds upon the carcasses of beasts' (Johnson); in the north of England, Scotland, and Ireland to the Rook, *C. frugilegus*; in U.S. to a closely allied gregarious species, *C. americanus*.

Materially parallel to the "raven's bill," the bills of crows have also inspired tools—the "bar of iron usually with one end slightly bent and sharpened to a beak, used as a lever or prise" we now call a "crowbar" was once simply referred to as a "crow." A farcical exchange in Shakespeare's *The Comedy of Errors* plays on this. When Antipholus of Ephesus says, "Well, I'll break in.—Go borrow me a crow," Dromio of Ephesus asks, "A crow without feather? Master, mean you so?...If a crow help us in, sirrah, we'll pluck a crow together." Antipholus of Ephesus retorts, "Go, get thee gone. Fetch me an iron crow" (Shakespeare qtd. in the *OED*).

The "crow" entry motions to a list of "phrases and proverbial sayings," including at least one with a victual link: "to eat (boiled) crow," an American colloquialism meaning "to be forced to do something extremely disagreeable and humiliating."

Given the sense of an "old crow" as a derogatory slang term for an "old or ugly" female, it is surprising that "crow's foot," which I discussed in conjunction with "goose-stepping" in my third chapter, is not mentioned in the same entry. Crows-feet receive their own noun entry referring to "One of the small wrinkles formed by age or anxiety round the outer corner of the

eye, 'thought to resemble the impression of the feet of crows.'" This sense has been transferred to imperfections in textiles as well, in a sub-definition referring to "undesirable creases, particularly in crêpe fabrics, that prevent the production of a uniform surface appearance" (1954 *Textile Institute* qtd in the *OED*). In another entry referring to crows as writing materials, there is the "crow-quill," a "pen for fine writing" historically made from a crow's wing, which has been transferred to the "name for a small fine steel pen used in map-drawing."

Of maps and movement, there are several definitions drawn from the flight path of crows. The *OED* defines both "crow-flight" and "crow-line" as linked to the "straight line" of a crow's flight. "As the crow flies" is an idiom referring to the shortest distance between two points, comparable to "in a beeline," or "in a direct line, without any of the *détours* caused by following the road." The phrase emerged in the early 19th century, according to Elizabeth Knowles' *The Oxford Dictionary of Phrase and Fable* and Robert Allen's *Allen's Dictionary of English Phrases*. Allen elaborates on before somewhat debunking a belief that the figure's origin is "based on a practice of early navigation at sea" in which "a cage of crows was kept on board and a crow would be released from the top of the mast (hence called the 'crow's nest') in the hope that it would fly directly to land to show the way." Since "the earliest evidence of the phrase...is distinctly landlocked...and we would expect earlier evidence if a naval phrase was familiar enough to have moved into more general currency," Allen believes that regardless of whether there was "naval practice regarding the crows, it does not seem to have been the origin of our phrase..."

Michael Quinion of *World Wide Words* further investigates and dates the earliest example to the late eighteenth century instead—specifically, a December 1761 edition of *The Gentleman's and London Magazine* in the sentence: "Now the country that those Indians inhabit

is upwards of 400 miles broad, and above 600 long, each as the crow flies." Quinion believes the true origin story of the idiom is also in "British country lore that's based on observation of the birds." After all, "Anyone who has watched a crow flying any distance knows it tends to do so in a steady, unwavering line—not always, but then this is a generalisation of a tendency, not invariable fact. Since the flight of the crow is unaffected by obstacles on the ground, its route came to represent the shortest distance between two points." Beyond this, he believes "to make a bee-line" comes from another "old country belief, that bees returning to the hive after gathering nectar always do so in a straight line." He cuts this note off soon with a curt, "This has been disproved."

Evidently, this might be the most consistent pattern of contemporary etymological query—the mapping of word origin stories are so often presented as an effort to strive for unadulterated truth, yet nearly always complicated by interruptions, appropriations, murmurations, folk beliefs, and so on. These latter elements form a new reality for the words they impact; sometimes falsities lead to polysemic poetry and vice versa. This might be read as a comment on how language, like everything else in this world, is prone to change, from immediate growth to the evolutionary adaptations of far-future generalizations. Sometimes, it is tempting to pursue the most straightforward path, "as a crow flies," but even the drawing of this particular line can be easily queered. Consider those fluid spaces between a raven and ravine, between gist and jizz.

~

Corvid Gifts

On May 3, 2019, *Audubon* published a piece by Jillian Mock asking, "Did Crows Actually Make These Gifts for the Human Who Feeds Them?" The piece served as commentary

to a March 2019 Tweet by Stuart Dahlquist featuring an image of the twiggy gifts with the post: "We've been feeding a small family of four crows (mated pair and their two year old kids) for several years. Last week two days in a row they left these gifts, pull tabs threaded onto pine twigs. This isn't only generous, it's creative, it's art. My mind is blown." John Marzluff, a conservation ecologist who has written on the so-called "gifting" of crows, has found the birds will "leave behind objects like keys, lost earrings, bones, or rocks, for the people who feed them" (Mock). This story is only one of many of crows offering so-called gifts to humans they recognize who consistently feed them; the press reception to these tales is uneven. Dahlquist's particular Tweet achieved popularity with over nine thousand retweets and thirty-four thousand likes in less than a month. Mock quotes animal behaviorist Kaeli Swift saying, "Humans are quick to assume that the crows leave behind objects as acts of gratitude...But when we assume gratitude, we project human emotions onto animal" (Mock).

There is nearly too much attention paid to anthropomorphism in animal studies so I will not dwell on this at length—but my sense is that anthropomorphism has value when it is utilized in an informed and calculated manner, with the appropriate disclaimers. Humans are notorious for selfishly prioritizing our own appearances and well-being, often at the extreme expense of the other flora and fauna with whom we share this planet. Crafting narratives of animals personified in human terms can encourage bystanders to be more affectively attuned the animals, because that is the extent to which we are self-involved. That being said, I imagine for every use of reckless anthropomorphism, there is a transformative one.

Mock claims that while crows are "highly intelligent creatures that make tools, recognize individual humans, and learn from one another," they "are not known to create or display art." I was reminded here of a provocative talk on animal artists I heard philosopher Vinciane Despret

deliver at Alphabet City in Pittsburgh's City of Asylum bookstore to promote the launch of her 2016 book, *What Would Animals Say If We Asked the Right Questions?* Despret's book is organized as an abecedary, a playful form reminiscent of children's books that is often used to surprising effect in scholastic texts. Susan Merrill Squier's *Poultry Science, Chicken Culture: A Partial Alphabet* from 2010 is another favorite literary avian studies book framed in this manner. The abecedary is also a form which invites deeper inquiry at the word level, often etymological.

The talk was drawn from her first chapter, "A for Artists: Stupid Like a Painter?" She recalled the history of the question of whether animals were capable of making art, and analyzed the complicated ethics and affects of elephants in the Maetang Elephant Park sanctuary outside of Chiang Mai, Thailand, being trained to paint for tourists in Asia by the tugging of their ears. She notes that scientists were eager to "debunk" the claims of elephant-as-artist because the ear-tugging training rendered the work "copying" instead of artistic creation. She calls this scientific "killjoy" attitude a "crusade of disenchantment" (3).

Despret thus ultimately resists answering the question of whether animals are artists, but chooses to speak of "achievements," of what happens when "beasts and humans accomplish a work together...with the with grace and joy of the work to be done" (6). She asks, "Isn't this what matters in the end? To welcome new ways of speaking, describing, and narrating that allows us to respond, in a sensitive way, to these events?" (6).

6.0 Conclusion: On a Lark

Pithetaerus surprises a chorus of Aristophanes' titular birds when he claims their avian "race is older than the Earth." The choir leader counters, "What, older than the Earth!...I never knew that before!" This gives Pithetaerus a chance to snarkily remark upon their unfamiliarity with Aesop's fable of the lark, claiming,

> ...you are ignorant and heedless, and have never read your Aesop. He is the one who tells us that the lark was born before all other creatures, indeed before the Earth; his father died of sickness, but the Earth did not exist then; he remained unburied for five days, when the bird in its dilemma decided, for want of a better place, to entomb its father in its own head. (Aristophanes)

In many interpretations, this is the origin lore of how crested larks received their characteristic crest, a prominent display of semiplume feathers which rise from their heads when they flirt, defend territory, sense, and sing. In some translations, the lark is female. Aesop's moral claims to be: "Youth's first duty is reverence to parents," but this seems murky to me (Townsend qtd. in Berezkin and Duvakin).

Another lark is the unlucky protagonist of the popular French-Canadian children's song, "*Alouette, Gentille Alouette*." There are variations of lyrics, but in each of them, the poor bird is plucked from "head, wings, back, tail..." all the way to their toes, to a jaunty and repetitive tune. The song is popularly used for pedagogical purposes; each verse is repeated several times over, requiring audience participation, useful for teaching French language learners the words for body parts. There exist several theories on why the lark is getting plucked, whether to be prepared as a meal or in a cruel act of vengeance for waking humans up with their loud and early morning song. It is likely the violence of the lyrics is overlooked or glossed over for young classroom audiences (Plouffe, LaForte, and others).

Another lark lyric more subtle in its striking violence can be culled from Emily Dickinson's poem, which begins: "Split the Lark—and you'll find the Music," and ends, "Now, do you doubt that your Bird was true?"

In *Scarlet Experiment: Birds and Humans in America* (2016), literary scholar Jeff Karnicky draws both the title of his book and introduction from this poem. "Split the lark," he explains, can be literally "read as a dissection of the bird to map out its sound organs," and depicts a bloody and visceral "scarlet experiment" conducted to "scientifically understand bird song at the expense of a living bird" (Karnicky xxi). Karnicky scales up this image of the "Scarlet experiment!" (capitalized and exclamation point-adorned in the original poem) to serve as "a marker of all the birds killed in America since the nineteenth century as a direct result of human actions…" (xvi). Karnicky's biopolitical project is much more direct and pragmatic than mine, though many of our topics, themes, and curiosities overlap.

When I read "split the lark," I do see the dissected bird with its "Bulb after Bulb" of organs and "Gush after Gush" of blood, a lark robbed of a life to benefit human knowledge. However, I am also inclined to interrogate it on a literal textual level, to consider "Split the Lark—and you'll find the Music" through an etymological lens, bringing us full-circle to the opening ideas of inten*t*ion and inten*s*ion. "Lark" as a word signifies more than a bird; it is another term with a mystery etymology and multiplicities of meanings, richness in inten*s*ion. The *OED* definitions of lark include, in no particular order:

- In noun form, birds in the *Alaudidae* family with "sandy-brown plumage, and remarkably long hind-claws."
- Another noun form is "a small boat."
- In a regional verb form, "may represent the northern lake...as heard by sporting men from Yorkshire jockeys or grooms; the sound...which is written lairk."
- In a colloquial verb form, a "frolicsome adventure" or spree"—"to go on, have, take a lark, to make a lark of," as synonymous with "to make a game of."

This final definition is the one I've embraced in this conclusion in order to suggest that by splitting "lark" into its many meanings and nuances and sounds, "you'll find the music." Dickinson's use of second-person is something I've interpreted as an invitation for phonic adventure; going on a lark has led me back to the idea of "game" as linked to the violent thrill of the hunt for which the lyrical, exclusive, excluding, and specialized set of collective nouns on which this dissertation is oriented were invented. Recall that James Lipton's book on collective nouns was called *An Exaltation of Larks: Or, The Venereal Game* (1977), and consider the exaltation.

The *OED* meanings of exaltation, which beyond being a "fanciful name" for a flock of larks is the "action of exalting; the fact or state of being exalted." This can signify physical elevation: an "action of lifting up or raising on high; the state of being lifted up, or set in a high position." It can be figurative, as an "Elevation in authority, dignity, power, station, wealth." Exaltation also has an affective connotation, an "Elation of feeling; a state of rapturous emotion; an undue degree of pleasurable excitement." The thrill of the hunt, perhaps. Finally, there is a sublime obsolete definition specific to historical "chemistry and physiology: The action or process of refining or subliming; the bringing a substance to a higher degree of potency or purity; an instance of the same," or a "substance in a highly refined condition."

There is music in all of this: in the messy thrill of the hunt to the refinement of the sublime, all packaged in a word signifying a playful avian flight. (Plus, "exaltation" is often confused with "exultation," as in, "action or state of exulting or rejoicing greatly; triumph, joyousness, rapturous delight," as in: the exultation of completing this dissertation at long last). This lark of a conclusion is my way of bringing this project full circle; the lark serve as a bookmark, a bird-mark, for projects to come. This is only a brief perch to play and ponder on,

and one of many; I am less interested in offering takeaways than in positing more possible points for takeoff. To paraphrase from (imperfect) memory the gist of a comment my co-adviser Cory Holding offered to me by word of mouth in one of our final meetings on this project—if this dissertation has arguments, they are "flock-shaped arguments," in which both the birds and the negative spaces between them must be read.

Bibliography

This bibliography is organized by chapters to allow each leg to stand alone.
All works cited as well as those alluded to and/or used for reference are included.

Introduction

Auerbach, Erich. *Mimesis: The Representation of Reality in Western Literature*. 50th anniversary ed. Princeton, NJ: Princeton University Press, 2003. Print.

Birkhead, Tim. *The Wisdom of Birds: An Illustrated History of Ornithology.* New York: Bloomsbury, Macmillan, 2008. Print.

Bizzell, Patricia, Helen Fox, and Christopher Schroeder. *ALT DIS: Alternative Discourses and the Academy.* Portsmouth, NH: Boynton/Cook – Heinemann, 2002. Print.

Chaucer, Geoffrey, and Kathryn L. Lynch. *Dream Visions and Other Poems: Authoritative Texts, Contexts, Criticism.* A Norton Critical Edition. New York: W.W. Norton & Co, 2007. Print.

Clare, John, *Poems, Chiefly from Manuscript.* London: Cobden-Sanderson, 1920. http://archive.org/details/cu31924007885316.

Coleridge, Samuel Taylor. "The Rime of the Ancient Mariner (Text of 1834). *Poetry Foundation.* https://www.poetryfoundation.org/poems/43997/the-rime-of-the-ancient-mariner-text-of-1834.

Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia.* Minneapolis: University of Minnesota Press, 1987.

Dickinson, Emily. *The Complete Poems of Emily Dickinson.* Boston: Little, Brown, 1924; Bartleby.com, 2000. www.bartleby.com/113/

Gordon, Jeremy G., Katherine D. Lind, and Saul Kutnicki. "A Rhetorical Bestiary," *Rhetoric Society Quarterly*, 2017: 47:3, 222-228.

Kalof, Linda, and Amy J. Fitzgerald. *The Animals Reader: The Essential Classic and Contemporary Writings.* Oxford: Berg, 2007.

Keats, John. "Ode to a Nightingale (1819)." *Poetry Foundation.* https://www.poetryfoundation.org/poems/44479/ode-to-a-nightingale.

Kennedy, George A. “A Hoot in the Dark: The Evolution of General Rhetoric.” *Philosophy and Rhetoric.* 25.1 (1992): 1-21.

Kirksey, Eben, ed. The Multispecies Salon. Durham, NC: Duke UP, 2014.

Hudson, Genevieve. “An Interview with Maggie Nelson. *Bookslut,* 2013. http://www.bookslut.com/features/2013_07_020156.php

Lamott, Anne. *Bird by Bird: Some Instructions on Writing and Life*. Anchor, 1995.

Lund, Nicholas. “Birdist Rule #72: It’s Okay to Hate Starlings.” *Audubon,* March 9, 2016. https://www.audubon.org/news/birdist-rule-72-its-okay-hate-starlings.

Nelson, Maggie. *Bluets*. Wave Books, 2009.

Oxford English Dictionary (OED) Online (multiple entries). Oxford University Press.

Pratt, Mary Louise. “Arts of the Contact Zone.” *Profession*, 1991, 33-40. www.jstor.org/stable/25595469.

Sword, Helen. *Stylish Academic Writing.* Cambridge, Mass: Harvard University Press, 2012.

Chapter One: Avian Rhetoric, Murmurations

Attanasi, Alessandro. et al. “Superfluid transport of information in turning flocks of starlings.” *Nature Physics,* vol. 10: 9, 691-696, 2014. https://arxiv.org/pdf/1303.7097.pdf.

Berger, John. *Why Look at Animals?* London: Penguin, 2009. Print.

Berners, Juliana, b. 1388?. *The Book of Saint Albans.* New York: Abercrombie and Fitch, 1966.

Bardsley, Jessica and Penny Lane. “The Commoners.” 22 March 2018. https://aeon.co/videos/the-manifest-destiny-of-starlings-how-a-nod-to-shakespeare-unleashed-an-avian-conquest.

Bronson, Wilfrid S. *Starlings.* New York: Harcourt, Brace and Company, 1948. Print.

"Can anyone find proof of ‘Shakespeare's Starlings’?" *Reddit AskHistorians,* 5 Feb. 2015. https://www.reddit.com/r/AskHistorians/comments/2uvmcg/can_anyone_find_proof_of_shakespeares_starlings/.

Cantwell, Robert. “A Plague of Starlings.” *Sports Illustrated.* 4 Sep. 1974. https://www.si.com/vault/1974/09/09/618881/a-plague-of-starlings.

Carson, Rachel. “How About Citizenship Papers for the Starling?” *Nature Magazine.* American Nature Association, 1939. https://brbl-dl.library.yale.edu/vufind/Record/3556334.

Carson, Rachel. *Silent Spring*. 40th anniversary ed., 1st Mariner Books ed. Boston: Houghton Mifflin, 2002.

Castillon, Neel. "A Bird Ballet." 2013. http://www.neelscastillon.com/portfolio/a-bird-ballet. Cavagna, Andrea and Giardina, Irene. "The Seventh Starling." *Significance*, 5: 62–66, 2008.

Chapman, Frank M. "List of Birds Found within Fifty Miles of the American Museum of Natural History." *American Museum Journal*, vol. 6, no. 3, 1906.

———. "The European starling as an American Citizen." *Natural History,* vol. 25, no. 5, 1925.

Derrida, Jacques, and Marie-Louise Mallet. *The Animal That Therefore I Am.* New York: Fordham UP, 2008. Print.

Dillard, Annie. *Pilgrim at Tinker Creek.* New York: Harper's Magazine Press, 1974.

Dowse, Rachel. "Starling Song: Murmurations of Meaning." 7 June 2017. https://www.youtube.com/watch?v=-DeF93qcsWE.

Feare, C. and Craig A. *Starlings and Mynas.* Princeton University Press, Princeton, NJ, 1999.

Goodenough, Anne E., et al. "Birds of a feather flock together: Insights into starling murmuration behaviour revealed using citizen science." *Plos One*, vol. 12, no. 6, 2017, https://doi.org/10.1371/journal.pone.0179277.

Gordon, Jeremy G., Katherine D. Lind, and Saul Kutnicki. "Introduction: A Rhetorical Bestiary." *Rhetoric Society Quarterly* (2017), 47:3, 222–228.

Gup, Ted. "100 Years of the Starling." *The New York Times,* 1 Sep. 1990, http://www.nytimes.com/1990/09/01/opinion/100-years-of-the-starling.html.

Hamilton, Alfred Starr, Ben Estes, and Alan Felsenthal. *A Dark Dreambox of Another Kind: The Poems of Alfred Starr Hamilton.* 1st ed. The Song Cave, 2013.

Haupt, Lyanda Lynn. *Mozart's Starling.* Little, Brown and Company. 2017. Print.

Hayden, Robert. "A Plague of Starlings, by Robert Hayden – Minor Works Project." https://minorworksproject.wordpress.com/2015/05/15/a-plague-of-starlings-by-robert-hayden/.

Highfield, Robert. "Starlings Know if You are Watching Them." *The Telegraph.* 30 April 2008. http://www.telegraph.co.uk/news/science/science-news/3341156/Starlings-know-if-you-are-watching-them.html.

Huizenga, Tom. “How Do You Bond With Mozart? Adopt A Starling.” *NPR.* 20 April 2017 https://www.npr.org/sections/deceptivecadence/2017/04/20/524349771/how-do-you-bond-with-mozart-adopt-a-starling.

Keats, John. “La Belle Dame sans Merci: A Ballad (1820)” *Poetry Foundation*. https://www.poetryfoundation.org/poems/44475/la-belle-dame-sans-merci-a-ballad.

Keyes, Scott and Daniel Karp. "The Shakespeare Fanatic Who Introduced All of the Bard's Birds to America.” 29 May 2014, https://psmag.com//environment/shakespeare-fanatic-introduced-bards-birds-america-82279.

Karnicky, Jeff. *Scarlet Experiment: Birds and Humans in America.* University of Nebraska Press, 2016.

Koren, Leonard. *Wabi-Sabi for Artists, Designers, Poets & Philosophers.* Imperfect Publishing, 2008. Print.

Lacey Act. *U.S. Fish and Wildlife Service.* 11 Dec. 2006. https://www.fws.gov/le/pdffiles/Lacey.pdf.

Lingis, Alphonso. “Animal Body, Inhuman Face.” in *Zoontologies: The Question of the Animal*, edited by Cary Wolfe. Minnesota UP, 2003.

Lipton, James. *Exaltation of Larks; Or, The Venereal Game.* Penguin, 1977.

Lunsford, Andrea A. “Can We Achieve Narrative Justice?” The Macmillan Community. 6 Sep 2018. Accessed June 22, 2019. https://community.macmillan.com/community/the-english-community/bedford-bits/blog/2018/09/06/can-we-achieve-narrative-justice.

Lunsford, Andrea A. “The Need for Narrative Justice.” The Macmillan Community.” 7 June 2018. https://community.macmillan.com/community/the-english-community/bedford-bits/blog/2018/06/07/the-need-for-narrative-justice.

Kennedy, George A. “A Hoot in the Dark: The Evolution of General Rhetoric.” *Philosophy and Rhetoric.* 25.1 (1992): 1-21.

Marche, Stephen. *How Shakespeare Changed Everything.* Harper Perennial, 2012.

McEwen, John. “Cheeps, tweets and warbles.” *The Spectator,* 19 Nov. 2005, https://www.spectator.co.uk/2005/11/cheeps-tweets-and-warbles.

Mitchell, Charles. “The Bard’s Bird; or, The Slings and Arrows of Avicultural Hegemony: A Tragicomedy in Five Acts.” *Terrain.* https://www.terrain.org/articles/26/mitchell.htm.

Morin, Duane. “Challenge Extended: Starlings.” 28 Oct. 2010, http://www.shakespearegeek.com/2010/10/challenge-extended-starlings.html.

"Word of the Day: Murmuration." *Dictionary.com,* 3 Jan. 2017. http://www.dictionary.com/wordoftheday/2017/01/03/murmuration.

Nagy, Kelsi, and Phillip David. Johnson. *Trash Animals: How We Live with Nature's Filthy, Feral, Invasive, and Unwanted species.* University of Minnesota Press, 2013.

Oxford English Dictionary (OED) Online (multiple entries). Oxford University Press.

Page, Jake. "Pushy and Brassy, the Starling was an Ill-Advised Import." *Smithsonian*, Sept. 1990, http://link.galegroup.com/apps/doc/A9344955/AONE?u=upitt_main&sid=AONE&xid=a02244c0.

Pfister, Damien Smith. "'A Short Burst of Inconsequential Information:' Networked Rhetorics, Avian Consciousness, and Bioegalitarianism." *Environmental Communication* 9, no. 1 (January 2, 2015): 118–36.

Pliny the Elder. *The Natural History.* Perseus Digital Library. http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.02.0137%3Abook%3D10.

Popova, Maria. "The Writing of 'Silent Spring': Rachel Carson and the Culture-Shifting Courage to Speak Inconvenient Truth to Power." *Brain Pickings*. 27 Jan. 2017. https://www.brainpickings.org/2017/01/27/rachel-carson-silent-spring-dorothy-freeman/.

Ritvo, Harriet. "Going Forth and Multiplying: Animal Acclimatization and Invasion." *On the Human*, 13 Nov. 2011, https://nationalhumanitiescenter.org/on-the-human/2011/11/going-forth-and-multiplying.

Reibstein, Mark and Ed Young. *Wabi Sabi.* Little, Brown Books for Young Readers, 2008.

"Starling Murmurations." *Royal Society for the Protection of Birds (RSPB).* https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/starling/starling-murmurations.

Shakespeare, William. *Henry IV.* http://shakespeare.mit.edu/1henryiv/full.html.

Shepley, Nathan. "Rhetorical-Ecological Links in Composition History," *Enculturation,* 2013, http://enculturation.net/rhetorical-ecological-links.

"Starling Plague." *Time*, vol. 15, no. 3, 20 Jan. 1930, p. 52. EBSCOhost, search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&db=tma&AN=54789177&scope=site.

Strycker, Noah. *The Thing with Feathers: The Surprising Lives of Birds and What They Reveal About Being Human.* Riverhead Books, 2015.

Tsing, Anna Lowenhaupt. “Unruly Edges: Mushrooms as Companion Species” *Environmental Humanities.* May 2012, 1(1): 141-154

West, Meredith and Andrew King. “Mozart’s Starling.” *American Scientist,* March-April 1990, http://www.indiana.edu/~aviary/Research/Mozart's%20Starling.pdf.

“What Bird Flocks and Fish Schools Can Teach Us About The Future.” 2013 Neal Conan interview with Ed Yong. *NPR.* http://www.npr.org/2013/06/13/191348007/what-flocks-of-geese-and-fish-can-teach-us-about-the-future.

Yochelson, Abby and Peter Armenti. “Shakespeare Is For The Birds,” *Library of Congress,* 29 June 2016, https://blogs.loc.gov/catbird/2016/06/shakespeare-is-for-the-birds/.

Yong, Ed. “How the Science of Swarms Can Help Us Fight Cancer and Predict the Future.” *Wired,* 19 March 2013. https://www.wired.com/2013/03/powers-of-swarms/all/.

Zielinski, Sarah. “The Invasive Species We Can Blame on Shakespeare.” *Smithsonian,* 4 Oct. 2011. https://www.smithsonianmag.com/science-nature/the-invasive-species-we-can-blame-on-shakespeare-95506437/.

Chapter Two: Gossamer Skeins

Adams, Mary Stewart. “When Old Mother Goose Takes to the Stars,” May 11, 2015. http://www.interlochenpublicradio.org/post/when-old-mother-goose-takes-stars.

Armstrong, Edward Allworthy. *The Life and Lore of the Bird in Nature, Art, Myth, and Literature.* New York: Crown Publishers, 1975.

———. “The Symbolism of the Swan and the Goose.” *Folklore* 55, no. 2. 1944: 54–58.

Badgerow, John P. “An Analysis of Function in the Formation Flight of Canada Geese.” The Auk 105, no. 4 (1988): 749–55.

Barchilon, Jacques, and Henry Pettit. *The Authentic Mother Goose: Fairy Tales and Nursery Rhymes*. Allan Swallow, 1960.

Baum, Lyman Frank. *Mother Goose in Prose*. Bobbs-Merrill, 1905.

Bottigheimer, Ruth B., ed. *Fairy Tales Framed: Early Forewords, Afterwords, and Critical Words*. Albany: SUNY Press, 2012.

Burgess, Anthony. “Don’t Cook Mother Goose: Don’t Cook Mother Goose Don’t Cook Mother Goose.” *New York Times (1923-Current File); New York, N.Y.* November 5, 1967, sec. The New York Times Book Review.

Conradt, Stacy. “Grave Sightings: Mother Goose.” Mental Floss, August 28, 2013. http://mentalfloss.com/article/52427/grave-sightings-mother-goose.

Dyche, Bill. “Anatomy Word of the Month: Pes Anserinus.” Des Moines University: Medicine & Health Sciences, August 1, 2013. https://www.dmu.edu/dose/2013/08/anatomy-word-of-the-month-4/.

Edwards, Jonathan. *Works of Jonathan Edwards*. New Haven: Yale University Press, 1957. http://archive.org/details/worksofjonathane06edwa.

Field, Walter Taylor. “The Evolution of Mother Goose.” *The Dial*, December 1, 1905.

Galway, Elizabeth. “Nursery Rhymes - Childhood Studies - Oxford Bibliographies,” June 25, 2013. http://www.oxfordbibliographies.com/view/document/obo-9780199791231/obo-9780199791231-0124.xml.

Geertz, Clifford, and Robert Darnton. *The Interpretation of Cultures: Selected Essays*. 3rd edition. Basic Book-S. New York: Basic Books, 2017.

Graham, Jorie. “The Geese.” *The Iowa Review* 10, no. 2 (April 1979): 84–84. https://doi.org/10.17077/0021-065X.2471.

Green, John. “Canada Geese and Diet Dr Pepper.” *The Anthropocene Reviewed.* WNYC Studios. 29 Jan 2018. https://www.wnycstudios.org/story/episode-1-canada-geese-and-diet-dr-pepper.

Grigson, Geoffrey. *The Shell Country Alphabet: The Classic Guide to the British Countryside*. London: Particular, 2010.

Grimm, Jacob, and James Steven. Stallybrass. *Teutonic Mythology*. London: G. Bell and sons, 1882. https://catalog.hathitrust.org/Record/001392688.

Hahn, Daniel, Humphrey Carpenter, and Mari Prichard. *The Oxford Companion to Children’s Literature*. Second Edition. New York, NY: Oxford University Press, 2015.

Hamilton, Nigel. *Biography: A Brief History*. Cambridge, Mass: Harvard University Press, 2007.

Hanson, Thor. *Feathers: The Evolution of a Natural Miracle*. New York: Basic Books, 2012.

Hill, Georgina O’Brien. “Charlotte Yonge’s ‘Goosedom.’” *Nineteenth-Century Gender Studies* 8, no. 1 (Spring 2012). http://www.ncgsjournal.com/issue81/hill.htm.

Jones, Christine A. *Mother Goose Refigured: A Critical Translation of Charles Perrault’s Fairy Tales*. Series in Fairy-Tale Studies. Detroit: Wayne State University Press, 2016.

“Jorie Graham.” *Poetry Foundation*. https://www.poetryfoundation.org/poets/jorie-graham.

Karlin, Barbara. “Birds of a Feather.” *The New York Times*, September 21, 1975, sec. Archives. https://www.nytimes.com/1975/09/21/archives/birds-of-a-feather.html.

Liberman, Anatoly. “Little Triumphs of Etymology: ‘Pedigree.’” Oxford University Press Blog, May 14, 2014. https://blog.oup.com/2014/05/pedigree-etymology-word-origin.

Matthews, Albert. “The Term Indian Summer.” *Monthly Weather Reviews* 902–906 (December 15, 1901): 69–80.

“MacCready ‘Gossamer Condor.’” National Air and Space Museum, April 7, 2016. https://airandspace.si.edu/collection-objects/maccready-gossamer-condor.

McCarthy, Eugene M. “Goose-Human Hybrids? - Hybrids out of History - Biology Dictionary.” Mammalian Hybrids. http://www.macroevolution.net/goose-human-hybrids.html.

“Mother Goose.” *New York Times*. 1886.

Oxford English Dictionary (OED) Online (multiple entries). Oxford University Press.

Planché, James Robinson. *Fairy Tales*. Routledge, Warne, and Routledge, 1867.

Power, Francis, and John Newbery. *Mother Goose’s Melody, or, Sonnets For the Cradle.* London, 1791. http://webapp1.dlib.indiana.edu/metsnav3/general/index.html#mets=http%3A%2F%2Fpurl.dlib.indiana.edu%2Fiudl%2Fgeneral%2Fmets%2FVAB8620&page=1.

Prošić-Santovac, Danijela. *Home and School Use of Mother Goose*. FON, 2009.

Quinion, Michael. “World Wide Words: Gander Month.” 20 Oct. 2012. http://www.worldwidewords.org/weirdwords/ww-gan2.htm.

Roger, Bernard. *The Initiatory Path in Fairy Tales: The Alchemical Secrets of Mother Goose*. First U.S. edition. Rochester, Vermont: Inner Traditions, 2015.

Rukeyser, Muriel. “Mother Geese.” *New York Times (1923-Current File); New York, N.Y.* November 14, 1971, sec. Book Review.

Rumpf, Marianne. “The Legends of Bertha in Switzerland.” Translated by Anthony Hellenberg and Elizabeth Tucker. *Journal of the Folklore Institute* 14, no. 3 (1977): 181–95.

Ryan. “Why Would the Celtic Christians Call the Holy Spirit the ‘Wild Goose’?” Mercy Hill Church. 27 April 2016. https://www.mercyhill.org/blog/2016/4/27/why-would-the-celtic-christians-call-the-holy-spirit-the-wild-goose.

Samber, Robert., Charles Perrault, William Henry Whitmore, Isaiah Thomas, and John Newbery. *The Original Mother Goose's Melody*. May G. Quigley Collection. Boston : London: Damrell & Upham ; Griffith, Farran & Co., 1892. https://catalog.hathitrust.org/Record/009925566.

Scheffler, Mark. "Goose-Stepping, the Dance Craze of Tyrants." Slate Magazine, January 29, 2003. https://slate.com/news-and-politics/2003/01/goose-stepping-the-dance-craze-of-tyrants.html.

Smith, John B. "Perchta the Belly-Slitter and Her Kin: A View of Some Traditional Threatening Figures, Threats and Punishments." *Folklore* 115, no. 2 (August 2004): 167–86.

Smith, Rita. "Mother Goose's Mysterious Melodies." *Recess: The World of Children's Culture Every Day* (blog), December 19, 2005. http://www.recess.ufl.edu/transcripts/2005/1219.shtml.

Southwick, Albert Plympton. *Handy Helps, No. 1: A Manual of Curious & Interesting Information*. E. L. Kellogg & Company, 1886.

Studebaker, Jeri. *Breaking the Mother Goose Code: How a Fairy-Tale Character Fooled the World*. John Hunt Publishing, 2015.

———. "Mother Goose: Why Was She Sometimes Shown as a Witch?" *Wild Woman Rising* 3, no. 4 (n.d.). http://www.wildwomanrising.com/mother-goose-why-was-she-sometimes-shown-as-a-witch/.

Sweeting, Adam W. *Beneath the Second Sun: A Cultural History of Indian Summer*. 1st ed. Revisiting New England. Hanover: University of New Hampshire, published by University Press of New England, 2003.

The Original Mother Goose's Melody. Boston: 1892. http://hdl.handle.net/2027/mdp.39076002154867.

"The Real Personages of Mother Goose by Katherine Elwes Thomas | Kirkus Reviews." https://www.kirkusreviews.com/book-reviews/katherine-elwes-thomas/the-real-personages-of-mother-goose/.

Thomas, Katherine Elwes. *The Real Personages of Mother Goose*. Boston: Lothrop, Lee & Shepard co., 1930. https://catalog.hathitrust.org/Record/001371719/Cite.

Thoreau, Henry David, Horace Elisha Scudder, H. G. O. (Harrison Gray Otis) Blake, Ralph Waldo Emerson, and F. B. (Franklin Benjamin) Sanborn. *The Writings of Henry David Thoreau. With Bibliographical Introductions and Full Indexes. In Ten Volumes*. Boston, New York, Houghton, Mifflin and Company, 1893. http://archive.org/details/cu31924022189629.

Walton, Susan. "'Spinning the Webs': Education and Distance Learning through Charlotte Yonge's Monthly Packet." *Victorian Periodicals Review* 49, no. 2 (2016): 278–304. https://doi.org/10.1353/vpr.2016.0019.

Webster, Noah, and Noah Porter. *Webster's Condensed Dictionary: A Condensed Dictionary of the English Language, Giving the Correct Spelling, Pronunciation and Definitions of Words*. Reilly & Britton, 1910.

Willard, Nancy. "Mother Goose Preserved: What Would Become of Poetry without Her?" *New York Times*. 1996, sec. Book Review.

Woolf, Virginia, and Susan Gubar. *A Room of One's Own*. A Harvest Book. Orlando, Fla: Harcourt, 2005.

Chapter Three: Homing Worlds

Adler-Kassner, Linda, and Elizabeth A. Wardle. *Naming What We Know: Threshold Concepts of Writing Studies,* Utah State University Press, 2016.

Allen, Barbara. *Pigeon*. London: Reaktion, 2009.

Biello, David. "The Case for Bringing Back the Passenger Pigeon." Nautilus, November 17, 2016. http://nautil.us/issue/42/fakes/the-case-for-bringing-back-the-passenger-pigeon.

Blechman, Andrew D. *Pigeons: The Fascinating Saga of the World's Most Revered and Reviled Bird*. New York: Grove, 2006.

Bodio, Stephen J. "Darwin's Other Birds." *All About Birds.* The Cornell Lab of Ornithology. http://www.allaboutbirds.org/Page.aspx?pid=1435.

Bogost, Ian. *Alien Phenomenology, Or, What It's like to Be a Thing*. Minneapolis: U of Minnesota, 2012.

Canova, Jane. "Monuments to the Birds: Dovecotes and Pigeon Eating in the Land of Fields." *Gastronomica* 5, no. 2 (2005): 50–59. https://doi.org/10.1525/gfc.2005.5.2.50.

Cohen, Revital, and Tuur Van Balen. "Pigeon D'Or." http://www.cohenvanbalen.com/work/pigeon-dor.

"Columbarium | Funerary Art." *Encyclopedia Britannica*. https://www.britannica.com/topic/columbarium.

Cooke, Arthur O. *A Book of Dovecotes.* London: T.N. Foulis, 1920.

Cruz, Emily. "Pigeons Write a Smog Blog." MNN - Mother Nature Network. February 2006. https://www.mnn.com/earth-matters/climate-weather/stories/pigeons-write-a-smog-blog.

Cuppy, Will. *How to Become Extinct*. Boston: D.R. Godine, Publisher, 2008.

Da Costa, Beatriz. “PigeonBlog 2006 – 2008.” http://nideffer.net/shaniweb/pigeonblog.php.

Darwin, Charles. *Variations of Animals and Plants Under Domestication, 2nd ed.* New York: D. Appleton & Co., 1883. http://www.esp.org/books/darwin/variation/facsimile/.

Dixon, E.S. *The Dovecote and the Aviary.* London: George Woodfall and Son, 1851.

“Dr. Tesla Gives Home to an Errant Pigeon That Flew Into 40th-Story Room in Hotel - ProQuest Historical Newspapers: *The New York Times*” 4 Feb 1935. http://search.proquest.com/hnpnewyorktimes/docview/101618078/338562E66C164857PQ/1?accountid=14709.

Field, Thalia. *Bird Lovers, Backyard.* New York: New Directions, 2010.

Freeman, David. "Nikola Tesla Fell in Love With a Pigeon" Huffington Post. 3 Dec 2013 http://www.huffingtonpost.com/2013/12/03/nicola-tesla-love-pigeon-facts-inventor_n_4320773.html.

Fuller, Errol. *Dodo: From Extinction to Icon.* London: HarperCollins, 2002.

Garn, Andrew, et al. *The New York Pigeon: Behind the Feathers*. Brooklyn: PowerHouse Books, 2018.

Geene, Anne, and Arjan de Nooy. *Ornithology*. Rotterdam: de HEF Publishers, 2016.

Gewin, Virginia. “Turning Point: Ben Novak.” *Nature* 497, no. 7448 (May 8, 2013): 279–279. https://doi.org/10.1038/nj7448-279a.

Greenberg, Joel. *A Feathered River Across the Sky: The Passenger Pigeon’s Flight to Extinction.* New York: Bloomsbury, 2014.

Gill, F & D Donsker (Eds). 2014. *International Ornithologists' Union World Bird List (v 4.2).* http://www.worldbirdnames.org/.

Hansell, Jean. *The Pigeon in History: Or, The Dove’s Tale*. Bath: Millstream, 1998.

Harper, Douglas. “Coccyx (n.).” Online Etymology Dictionary. https://www.etymonline.com/word/coccyx.

Hausheer, Justine E. “How Do Pigeons Find Their Way Home? | *Audubon*.” 19 October 2012. https://www.audubon.org/magazine/september-october-2012/how-do-pigeons-find-their-way-home.

Heise, Ursula K. *Imagining Extinction: The Cultural Meanings of Endangered Species*. Chicago: The University of Chicago Press, 2016.

Holsinger, Bruce. "Of Pigs and Parchment: Medieval Studies and the Coming of the Animal." *PMLA*, Vol. 124, No. 2 (Mar. 2009): 616-623.

Holt, Jim. “Modernism Was Easy - The New York Times.” 21 February 1999. https://www.nytimes.com/1999/02/21/books/modernism-was-easy.html.

Hoggott, Rueben. "1940 – Project Pigeon (1948 – Project Orcon) – B.F. Skinner (American). *Cybernetic Zoo: A History of Cybernetic Animals and Early Robots.* http://www.cyberneticzoo.com.

Humphries, Courtney. *Superdove: How the Pigeon Took Manhattan – and the World*. New York: Smithsonian, 2008.

Jerolmack, Colin. *The Global Pigeon.* Chicago: U of Chicago, 2013.

Johnson, Nathanael. *Unseen City: The Majesty of Pigeons, the Discreet Charm of Snails & Other Wonders of the Urban Wilderness*, Rodale Books, 2016.

Johnston, Richard F. "Pigeons." *The Cambridge World History of Food. 1st ed.* Cambridge: Cambridge University Press, 2012. 561-565.

L’hoir, Francesca Santoro. “Death’s Mansions: The Columbaria of Imperial Rome.” Ancient History Encyclopedia, November 3, 2014. https://www.ancient.eu/article/764/deaths-mansions-the-columbaria-of-imperial-rome/.

Liberman, Anatoly. *Word Origins: And How We Know Them; Etymology for Everyone*. New York: Oxford University Press, 2009.

Moore, John. *Columbarium: or, the Pigeon-House.* London, 1735.

Nagy, Kelsi, Phillip David Johnson II, and Randy Malamud. *Trash Animals: How We Live with Nature’s Filthy, Feral, Invasive, and Unwanted Species.* Minneapolis: U of Minnesota Press, 2013.

"Pigeon Search and Rescue Project." *Project Sea Hunt: U.S. Coast Guard Pigeon Experiment.* http://www.uscg.mil/history/articles/pigeonsarproject.asp.

Pettman, Dominic. “Wings of Desire.” Cabinet, Fall 2014. http://cabinetmagazine.org/issues/55/pettman.php.

Price, Jennifer. *Flight Maps: Adventures with Nature in Modern America*. New York: Basic Books, 1999.

"Rock Pigeon." *All About Birds.* The Cornell Lab of Ornithology. http://www.allaboutbirds.org/guide/rock_pigeon/lifehistory.

Sedgwick, Eve Kosofsky, and Adam Frank. *Touching Feeling: Affect, Pedagogy, Performativity*. Series Q. Durham: Duke University Press, 2003.

Shefer, Elaine. *Birds, Cages and Women in Victorian and Pre-Raphaelite Art. American University Studies:* Series 20, Fine Arts. Vol. 12. New York: Peter Lang, 1990.

Shipka, Jody. *Toward a Composition Made Whole.* Pittsburgh: University of Pittsburgh Press, 2011.

Staub, France. "Le Musée Du Dodo: Dodo and Solitaires, Myths and Realities." 18 May 2016. https://www.potomitan.info/dodo/c32.php.

Stein, Gertrude. "Pigeons on the Grass Alas," from *Four Saints in Three Acts.* https://allpoetry.com/From-Four-Saints-in-Three-Acts.

Song, Hoon. *Pigeon Trouble: Bestiary Biopolitics in a Deindustrialized America*. Philadelphia: U of Pennsylvania, 2010.

"The Oxford Dodo." Oxford University Museum of Natural History. https://oumnh.ox.ac.uk/the-oxford-dodo.

Thurber, James. "There's an Owl in My Room." *James Thurber: Writings & Drawings*. Library of America, 1996.

Voon, Claire. "An Alternative Encyclopedia of Birds Categorized by Poop, Art History, and More." Hyperallergic, August 29, 2016. https://hyperallergic.com/316907/an-alternative-encyclopedia-of-birds-categorized-by-poop-art-history-and-more/.

Walters, Betty Lawson. *The King of Desks: Wooton's Patent Secretary.* Washington: Smithsonian Institution, 1969.

Willems, Mo. *Don't Let the Pigeon Drive the Bus!* London: Walker, 2005.

Williams, Howard M.R. "Columbaria – Pigeon Houses for the Dead." *Archaeodeath* (blog), April 10, 2016. https://howardwilliamsblog.wordpress.com/2016/04/10/columbaria-pigeon-houses-for-the-dead/.

Williams, Raymond. *Keywords: A Vocabulary of Culture and Society*. New edition. Oxford New York: Oxford University Press, 2015.

Wolfe, Cary. "Each Time Unique: The Poetics of Extinction," in *Animalities: Literary and Cultural Studies Beyond the Human,* ed. Michael Lundblad. Edinburgh University Press, 2018.

Wray, John. "Paris Review - Ursula K. Le Guin, *The Art of Fiction* No. 221. Issue 206, Fall 2013. https://www.theparisreview.org/interviews/6253/ursula-k-le-guin-the-art-of-fiction-no-221-ursula-k-le-guin.

Yodanis, John. "John Yodanis Papers," 1919–1987, MSS 293, Detre Library & Archives. Heinz History Center.

Chapter Four: Corvid Jizz

Allen, Robert. *Allen's Dictionary of English Phrases*. Penguin UK, 2008.

Aristophanes. “The Birds.” http://www.perseus.tufts.edu/hopper/text.jsp?doc=Perseus:text:1999.01.0025.

Barlow, Kimberly K, “Annual Crow Stopover Makes Work for Facilities.” *University Times.* University of Pittsburgh University Marketing Communications. https://www.utimes.pitt.edu/archives/?p=41440.

BirdNote, “How to Tell a Raven From a Crow.” *Audubon*, October 22, 2012. https://www.audubon.org/news/how-tell-raven-crow.

Carroll, Lewis. “Through the Looking-Glass.” The Project Gutenberg EBook. http://www.gutenberg.org/files/12/12-h/12-h.htm.

Cole, “Who Was Corax?” *Illinois Classical Studies* 16:65-84, 1991.

“Crow Deterrent’ Machines Installed At Cathedral Of Learning.” *CBS Pittsburgh.* https://pittsburgh.cbslocal.com/2018/11/15/cathedral-of-learning-crow-deterrent-machines/.

Derrida, Jacques. "Plato's Pharmacy," *The Norton Anthology of Theory and Criticism (Second Edition).* Eds. Vincent B. Leitch, et al. New York: W.W. Norton and Company, 2010.

Dickens, Charles. *Barnaby Rudge: A Tale of the Riots of 'Eighty.* 1841. http://www.online literature.com/dickens/barnabyrudge.

Dickens, Charles. *Barnaby Rudge: A Tale of the Riots of 'Eighty.* 1858. The Project Gutenberg EBook.

Dué, Casey. “Winged Words. Engines of Our Ingenuity by John H. Lienhard. https://www.uh.edu/engines/epi2696.htm.

Greenwood, Jeremy, and Julian Greenwood. "The Origin of the Birdwatching Term 'Jizz.'" *British Birds*, vol. 111, no. 5, September 2018, pp. 292-294.

Grubb, Gerald G. “The Personal and Literary Relationships of Dickens and Poe.” *Nineteenth-Century Fiction.* Vol. 5, No. 2 (Sep. 1950), pp. 101-120. University of California Press. http://www.jstor.org/stable/3044330.

Hardy, Thomas. *Jude the Obscure*. 1895. The Project Gutenberg EBook. https://www.gutenberg.org/ebooks/153.

Haupt, Lyanda Lynn. *Crow Planet: Essential Wisdom From the Urban Wilderness*. New York: Back Bay Books, 2011

Hawhee, Debra. *Rhetoric in Tooth and Claw: Animals, Language, Sensation*. Chicago: The University of Chicago Press, 2017.

Heinrich, Bernd. *Mind of the Raven: Investigations and Adventures with Wolf-Birds.* Harper Perennial, 2007.

Hinks, D. A. G. "Tisias and Corax and the Invention of Rhetoric." *The Classical Quarterly,* vol. 34, no. 1-2, 1940, pp. 61–69.

Hume, Rob, and Ian Wallace. *Birds by Character: Britain & Europe: the The Field Guide to Jizz Identification.* Macmillan, 1990.

Karlson, Kevin, and Dale A. Rosselet. *Peterson Reference Guides: Birding by Impression: A Different Approach to Knowing and Identifying Birds.* Houghton Mifflin Harcourt, 2015.

Kennedy, George A. "A Hoot in the Dark: The Evolution of General Rhetoric." Philosophy and Rhetoric 25.1 (1992): 1-21.

Kennedy, George. *A New History of Classical Rhetoric.* Princeton University Press, 2014.

Knowles, Elizabeth. *The Oxford Dictionary of Phrase and Fable.*

Marzluff, John, and Tony Angell. *Gifts of the Crow: How Perception, Emotion, and Thought Allow Smart Birds to Behave like Humans*. Place of publication not identified: Free Press, 2014. http://www.myilibrary.com?id=893705.

Oxford English Dictionary (OED) Online (multiple entries). Oxford University Press.

"Online Etymology Dictionary | Origin, History and Meaning of English Words." https://www.etymonline.com/.

Poe, Edgar Allan. "The Philosophy of Composition." 1846, 1850. http://xroads.virginia.edu/~HYPER/poe/composition.html.

Poe, Edgar Allan. "The Raven." 1845. http://www.eapoe.org/people/dickensc.htm#criticism.

Raman, Meenakshi, and Sangeeta Sharma. *Technical Communication: Principles and Practice*. Third edition. New Delhi: Oxford University Press, 2016.

"Aristophanes' Quote 'By Words Mind Is Winged' Meaning." *Reddit AskLiteraryStudies.* https://www.reddit.com/r/AskLiteraryStudies/comments/8g28rf/aristophanes_quote_by_words_mind_is_winged_meaning/.

Reed, Amanda. "Facilities Management, Aviary Work to Combat Campus Crows." *The Pitt News.* https://pittnews.com/article/115672/featured/campus-crows/.

Reece, Steve. *Homer's Winged Words: The Evolution of Early Greek Epic Diction in the Light of Oral Theory*. Mnemosyne. Supplements, Monographs on Greek and Roman Language and Literature, v. 313. Leiden ; Boston: Brill, 2009.

Rooney, Kim. "Oakland Crows: A Big Mess but a Harmless Murder." Accessed May 17, 2019. http://www.pittsburghmagazine.com/Best-of-the-Burgh-Blogs/The-412/January-2017/Oakland-Crows-A-Big-Mess-but-a-Harmless-Murder/.

Skaife, Christopher. *The Ravenmaster: My Life with the Ravens at the Tower of London*. First edition. New York: Farrar, Straus and Giroux, 2018.

St. John, Kate. "Chasing Crows." *Outside My Window.* December 31, 2018. https://www.birdsoutsidemywindow.org/2018/12/31/chasing-crows/.

Vanguri, Star Medzerian. *Rhetorics of Names and Naming.* New York: Routledge, 2016. Print.

Karlson, Kevin, and Dale A. Rosselet. *Peterson Reference Guides: Birding by Impression: A Different Approach to Knowing and Identifying Birds.* Houghton Mifflin Harcourt, 2015. Print.

Martin, Emily. "The egg and the sperm: How science has constructed a romance based on stereotypical male-female roles." Signs (1991): 485–501.

McDonald, David. "The Etymology of 'Jizz'." Originally published in *Cranberra Bird Notes*. Vol. 21, No. 1, pp. 2-11). 1996. http://www.scribd.com/doc/16209649/The-etymology-of-jizz#scribd.

Partridge, Eric, and Tom Dalzell. *The New Partridge Dictionary of Slang and Unconventional English.* London: Routledge, 2006.

Schaffner, Spencer. *Binocular Vision: The Politics of Representation in Birdwatching Field Guides.* Amherst: U of Massachusetts, 2011. Print.

Stiteler, Sharon. "Tuesday Birds." 25 October 2005. http://www.birdchick.com/blog/2005/10/tuesday-birds.

Strycker, Noah K. "A Birding Interview with Pete Dunne." Birding. March/April 2008. https://www.aba.org/birding/v40n2p20.pdf.

Villazon, Luis. "Do Crows Actually Fly in a Straight Line?" BBC Science Focus Magazine. https://www.sciencefocus.com/nature/do-crows-actually-fly-in-a-straight-line/.

Winchester, Simon. *The Professor and the Madman: A Tale of Murder, Insanity, and the Making of the Oxford English Dictionary.* New York: Harper Collins, 1998. Print.

Weaver, Peter. *The Birdwatcher's Dictionary*. Calton, Eng.: T. & A D Poyser, 1981. Print.

Wood, D. Scott. “Review: The Birdwatcher's Dictionary by Peter Weaver.” The Wilson Bulletin (Wilson Ornithological Society). Vol. 95, No. 1 (March 1983), pp. 166-167. http://www.jstor.org/stable/4161743.

Conclusion

“Alouette (Song).” *Wikipedia.* https://en.wikipedia.org/w/index.php?title=Alouette_(song)&oldid=900459386.

Aristophanes. *The Birds.* http://www.perseus.tufts.edu/hopper/text.jsp?doc=Perseus:text:1999.01.0025.

Berezkin, Yuri and Evgeny Duvakin. “Buried in a Head: African and Asian Parallels to Aesop’s Fable.” *Folklore,* 127: 1, 91-102.

Dickinson, Emily. *The Complete Poems of Emily Dickinson.* Boston: Little, Brown, 1924; Bartleby.com, 2000. www.bartleby.com/113/.

Karnicky, Jeff. *Scarlet Experiment: Birds and Humans in America.* University of Nebraska Press, 2016.

LaForte, Conrad. *Survivances Médiévales dans la chanson folklorique, les presses de l'Université Laval,* 1981, pp. 227–229.

Lipton, James. *Exaltation of Larks; Or, The Venereal Game.* Penguin, 1977.

Plouffe, Hélène. “Alouette!” *The Canadian Encyclopedia.* 21 Jan 2014. https://www.thecanadianencyclopedia.ca/en/article/quotalouettequot-emc.